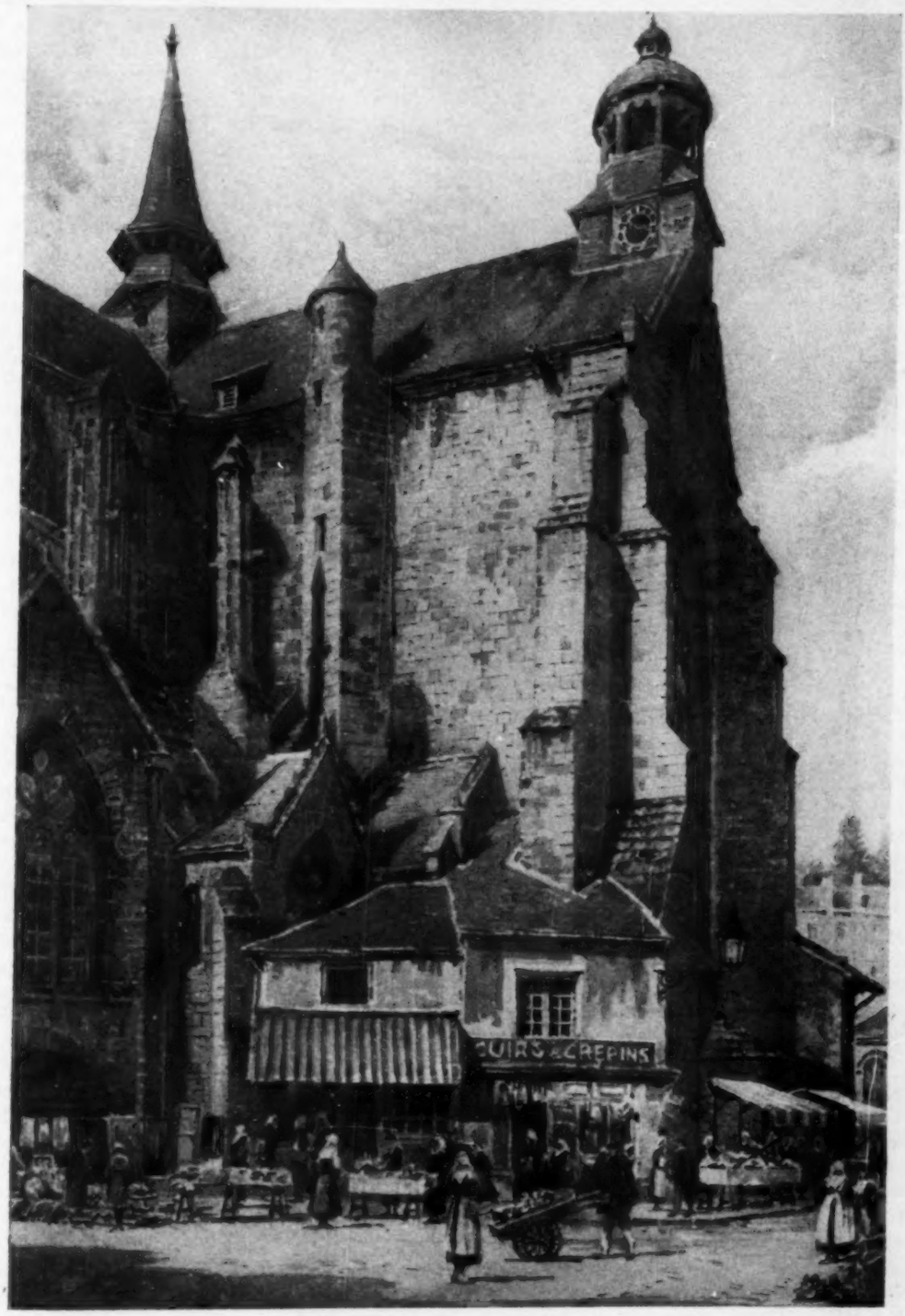
THE BUILDER
A JOURNAL FOR THE ARCHITECT & CONSTRUCTOR

VOL. CXXXIX. DECEMBER 19, 1930. No. 4585.



A Holiday Sketch. By Mr. A. C. Fabe, A.R.I.B.A.

MEETINGS

Friday, *December* 19.

London Society. Professor S. D. Adshead on "South Essex: its Docks, Industries, and Houses." 5 p.m.

Friday, *January* 2, 1931.

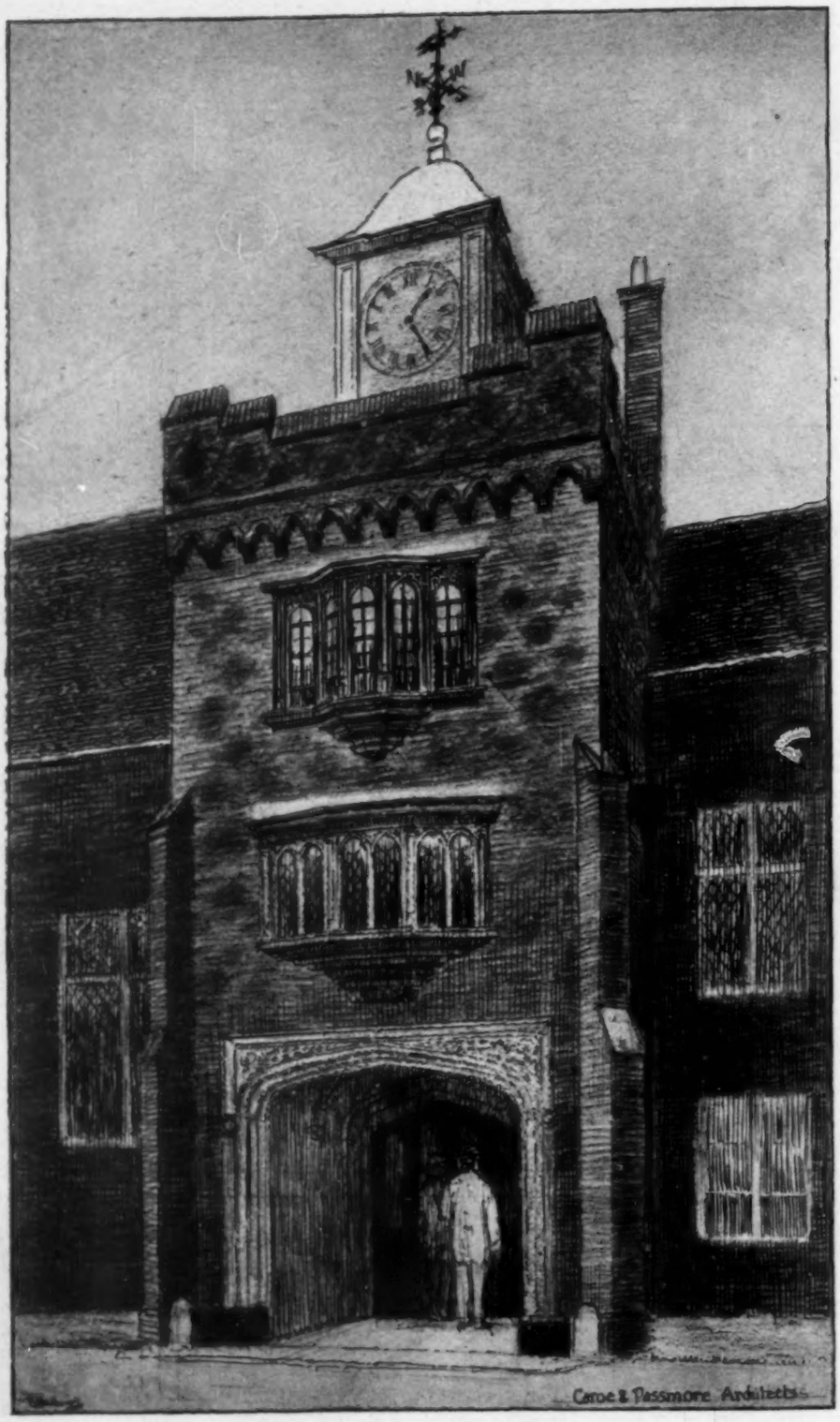
Institution of Mechanical Engineers. Mr. S. J. Davies on "An Experimental Investigation into Induction Conditions, Distribution, and Turbulence in Petrol Engines." 6 p.m.

Monday, *January* 5.

Royal Institute of British Architects. Award of Prizes and Studentships. Criticism by Mr. T. A. Darcy Braddell on work submitted for Prizes and Studentships. 8 p.m.

Tuesday, *January* 6.

Institution of Electrical Engineers (Scottish Centre). Mr. W. G. Johnson on "Street Lighting." At Edinburgh. 7.15 p.m.



Reconstructed Oriel Window over Entrance, Fulham Palace.

MESSRS. CARÖE AND PASSMORE, F. & A.R.I.B.A., Architects.

(*See page* 1036.)

THE ANCIENT MONUMENTS BILL.

THE Ancient Monuments Bill, which passed its second reading in the House of Lords last week, marks yet another definite stage in the progress of public responsibility. In it preservation of the old and construction of the new are recognised by legislation as dual activities in the amenity of monuments generally, not only our national treasures, but the context of their setting is to be preserved from future vandalism. We need only cite such provisions as those concerning "any area comprising or adjacent to the site of the monument," where the Commissioners shall be empowered to prohibit or restrict new constructions, and where position, height, size, design, materials, colour, and screening shall be subject to control.

The influence of these provisions will be not only corrective and prohibitory, but educative in a wide sense. In them we may find legalised the ideal of historical and artistic unity, and the subordination of personal whim to general propriety. The principles underlying this Bill are those so constantly urged by such Societies as those concerned with the Preservation of Rural England, by Regional and Town Planning enthusiasts, by architects and artists, and—which is a valuable reinforcement—by powerful motoring and tourist bodies to whom the protection and embellishment of our countryside possess increasing advantage. Many readers of *The Builder* must have relished the wit and wisdom of the two Cautionary Guides to St. Albans and Oxford that were sponsored by the Design and Industries Association. The fact that Carlisle itself prepared and published its own Cautionary Guide is proof of the impetus gained, and an extension of such local propaganda would be invaluable in creating that informed public opinion which must be enlisted before any Act can become effectively operative.

In our natural enthusiasm for this piece of civilised legislation, we must not lose sight of the difficulties that its wide powers are bound to create when first applied. Private property and old-established interests have their roots entangled around many ancient monuments, and the root pruning will require judgment and tact. The compensation clause, for example, includes a new departure in the provision that where, through a preservation scheme, any property is increased in value the Commissioners can recover the amount of that increase in full. It is difficult to see why, in town planning schemes, the individual should be compensated in full for deterioration, but should retain 60 per cent., or even 25 per cent., when his property is increased in value. The general principle that profits and losses should be pooled and then distributed fairly among those who gain and those who lose must be sound economics, since efficient development means, of necessity, an improved economic return, an improvement in which all concerned would have their fair share.

This Bill does not deal exclusively with those structures usually associated in the public mind with "ancient monuments," but it includes within its scope buildings of a humbler but hardly less valuable description. One of the most serious dangers hanging over our smaller traditional buildings has been that of their export to the United States. It is hard to imagine how anyone could tear up a building by the roots and plant it among alien conditions without realising that in so doing he was destroying its traditional setting and æsthetic value; nevertheless, the practice has been increasing dangerously. Under this Bill, such activities can be prohibited by an order of the Commissioners which would make exportation in whole or part illegal. It may be questioned as to how far special orders will meet the case, since they postulate that individual State attention is drawn to each particular menace, when it appears. The Irish Free State National Monuments Act, 1930, while it does not deal with the exportation of privately owned "monuments," yet deals conclusively with the export of archæological objects, which would include the fittings of the building and so serve the same purpose as though the building itself were scheduled. Under this Act it is illegal to attempt to export or sell for export any archæological object without first obtaining a licence from the Minister of Education, the term "archæological object" in this case covering the widest field short of including pictures and tapestries. Under the principle in the British Bill the onus of preservation is thrown on the State, so that an individual wishing to remove an old building may do so if he can avoid stirring the Commissioners to action: under the Irish principle, it is for the individual to approach the State first if he is to avoid illegality and its consequences. It should be possible in England to prevent the export of buildings on similar lines, and so to force all individuals who have designs upon buildings of interest and value to obtain permission before removing them. In the same clause it is made obligatory upon the Commissioners to cause a copy of the preservation order to be "fixed on some conspicuous part of the monument." There are instances where this might seriously injure the amenity of a monument, and we would suggest that the alternative "or conspicuously adjacent thereto" might be inserted.

The provision that allows the Commissioners to co-operate with voluntary associations or private owners in plans for the expense of maintenance of particular buildings is practical and sympathetic. There are many cases where owners have maintained their responsibilities with public-spirited self-sacrifice, and where these are acting for the good of the monument it is not the intention of the promoters to drag them into official line. Neither can it be urged that the public has the right of access to monuments of national or archæological importance, since public good manners cannot be depended upon; constant supervision is essential. It cannot be doubted that many more monuments, houses, and gardens would be open to the public were it not for the danger and damage which are caused by unmannerly visitors.

It is unfortunate that such living "ancient monuments" as historic trees are given no protection unless they are growing within the prescribed area surrounding an historic building. It is no exaggeration to say that the destruction of historic trees is proceeding at a rate that is positively disastrous, and these are as well entitled to preservation as are brick and stone. If we again turn to the Irish Free State, we find the Forestry Act of 1928, which prohibits the cutting of any tree, subject to obvious exceptions, which is not situated in an urban area or within a hundred feet of a building, without written notice being given to the Civic Guard. The Minister of Agriculture may then within twenty-one days issue a prohibition order. Such powers, wisely used, would save many an historic land-mark now marked out for ruthless destruction. In conclusion, we would recommend careful study of this Bill, and we can only hope that when it is available as an Act its provisions will be actively enforced.

NOTES

R.A. Studentships.

The President of the Royal Academy—in his address to the students last week on the occasion of the annual distribution of prizes and studentships, said the work of the year was of a higher standard than that of previous sessions. This may be so in painting, but the designs submitted for the decoration of a public building (£30 and medal) were distinctly poor. Years ago these designs and the full-size cartoons were sought by the architectural Press on account of their highly decorative qualities. Well we remember the work of Byam Shaw, Fred Appleyard and W. E. G. Solomon, names that at the moment come to mind. The Architecture and Sculpture subject (The Entrance to a Town Hall) was poor, the sculpture students lacking a knowledge of architecture. A prize offered for a similar subject in which an architectural student and a sculpture student combined would, we venture to think, be a happy combination. This is what does or should happen in actual practice. Some good measured drawings were submitted, the subject being "The Orangery, Kensington," won by Mr. G. A. MacDonell. The Landseer prize of £60 for an artist's house, a subject which usually attracts students in most schools, only produced two at the R.A. The winning design is a good one both in plan and elevation. The garden was also broadly laid out. This design is illustrated in our issue this week.

The A.A. Pantomime.

On Tuesday last we had the pleasure of attending a performance of the A.A. Pantomime, which has been drawing crowded audiences to Bedford-square during the present week. Like several of its immediate predecessors, the present show takes the form of a revue and consists of some nineteen items, providing nearly three hours of excellent light entertainment. Sketch follows sketch in quick succession, and there is not really a dull moment in the whole show. Only a few of the items are strictly architectural in character, but full advantage is taken of any opportunity for sprightly jesting at the expense of architects and architecture. Here is a typical sally :—

"What does Mendelsohn mean, Bill?"
"Oh, that's German for architecture."
"I know—what we call 'greenhouses' in this country."

Herr Mendelsohn was present at Tuesday evening's performance and seemed to enjoy the joke as much as anybody. Everything in the revue has been devised, composed or made by the students —book, lyrics, music, scenery, costumes, lighting, etc.—and all are excellent. The acting is surprisingly good and there is some first-rate solo and concerted singing and dancing. "Mr. Goodden's young ladies," indeed, dance with an agility and a grace that would do credit to Mr. Cochran's chorus. There is also some excellent ukulele playing by male members of the cast. Altogether a joyous entertainment. The students are to be heartily congratulated on the success of their efforts.

The Late Sir Aston Webb, R.A.

From an appreciation of Sir Aston Webb by Mr. William Lucas, F.R.G.S., in an Australian contemporary, we take the following notes :—

"As to the distinctive contribution of the life of Sir Aston Webb to architecture, in one direction probably Sir Edwin Lutyens (twenty years his junior) some years ago well expressed the truth when, associating him with Norman Shaw and Philip Webb as great modern forces, he said: 'Sir Aston Webb, although not an entire Classicist, has an outlook that is excellently fine, and has helped us towards more sober attainments and satisfactory proportions in the traditions of modern classicism.' Possibly he was far more eclectic than any of his chief contemporaries, and it was by no means easy to define his canon of beauty in regard to elevational dressing. Now and then he produced Gothic work, such as at Worcester, Collegiate buildings at Cambridge, and in the restoration of St. Bartholomew's Church, London, that any lover of that phase of the architecture of England, France or Spain might well be proud of; and at other times work which was far removed from the Gothic temper. Still, his mental attitude was entirely evolutionary, and on occasion restlessly so; the most marked example possibly being the Victoria and Albert Museum, which, won in conjunction with Ingress Bell, on a pronounced, though individualistic, type of Spanish was, after many variations of design, so erected, that a reviewer termed it 'the most outstanding example of the New Renaissance.'"

A Beverley Doorway.

(Carved Wood Panel by the late Mr. Elwell.)

Bronze Door Panel at Entrance to the Selfridge Store, Oxford Street, W.
Mr. Gilbert Bayes, F.R.B.S., H.R.I., Sculptor.

Sculpture Group, "Pharaoh's Daughter."
By Miss Maidie Buckingham.

The Victoria Memorial.

"The supreme opportunity of Webb's life," continues Mr. Lucas, "came when he found himself one of the five selected to compete for the Queen Victoria Memorial, a Royal Road to Buckingham Palace. Towards the solving of the main problems of that scheme, all former strenuous study as to the principles of planning served him well. I well recall that among the many subjects talked of that afternoon, when we were together two years ago, was this memorial; when I remarked that, in view of all that had been revealed in his published work and stressed by him in speech and pen as to such fundamentals as the individuality of each site, axiality, the handling of frontage lines, the method of approach, and emphasis of entrance, it was a surprise to me that his fellow-competitors on that occasion had not given him a far harder run for the honour. 'Oh,' he replied, 'while you younger men would note what I had said on these points, my contemporaries would not do so.' In his last letter to me, a year ago, referring to:—

'Guests of the Ages at to-morrow's door,
Why shrink we? The long track *behind* us lies,
The lamps gleam and the music throbs *before*,
Bidding us enter; and I count him wise
Who loves so well man's noble memories.
He needs must love man's nobler hopes yet more.'

Sir Aston said: 'I have always kept that poem in my memory, and it has been of use to me.'"

The Bradford Improvement Scheme.

Bradford Corporation at the present moment is debating the point whether, in view of the various factors which are militating against industry, it would not be advisable to postpone the commencement of the Improvement Scheme for the central area—which, it will be remembered, was recently the subject of a competition, won by Mr. C. Cowles-Voysey. Rash speculation in building is always to be regretted, but it may be pointed out that at the present time prices of materials are lower than at any time since the war, and competition is keen. There is another side to the policy of "sitting tight" and waiting for a more propitious moment to set schemes going. Industrial and national success is dependent not on one branch of industry alone, but on the cumulative activity of all. If those authorities that have it in their power to put forward legitimate schemes hold back awaiting "better times," general stagnation must result. It may be useful here to recall the financial figures relating to another improvement scheme—that of the Headrow, Leeds. The total cost of the street has been approximately £414,000, while the income from the sale of plots will be £503,208. The gross profit of £89,000 would seem to point to the fact that good architecture has still a very definite financial value.

The National Housing Council.

We must all feel that the uncertainty and inefficiency which appear to follow all our efforts to place the work of housing reform on a legitimate and safe business basis should be faced and call for adequate and immediate legislation. There must be a way. Is the establishment of a National Housing Board the only practical way to get something practicable done? Sir J. Tudor Walters sees no difficulty in constituting a National Housing Board of four to five men of experience to whom would be entrusted the task of organising a real Building Programme. A National Housing Board need not involve the creation of a large army of officials.

A Beverley Doorway.

We illustrate on page 1034 a carved wood panel designed by the late Mr. Elwell, the well-known wood carver. It shows J. L. Toole as the "Toy Maker" in the scene from Dickens's "Christmas Carol," and is over the entrance to Pinewood, the residence of Dr. Thornley, Beverley North Bar Outer. An inscription at the foot reads —"We like to go as near nature as we can for sixpence." Two other carved panels, political subjects, showing Gladstone and Disraeli, are over the entrance to Mr. Elwell's premises beside the North Bar. The wood carvers of Beverley have a wide reputation, and examples from Mr. Elwell's studio are in many of our cathedrals and parish churches.

Mr. E. J. Brown.

The dinner which Mr. Ernest Brown gave to a number of his colleagues and friends on Monday night was as happy in its execution as it was spontaneous in conception. The occasion was really to celebrate the seventieth birthday of the "Master Builder of London" as Lord Burnham happily put it during the evening—but coupled with that was another sentiment. The building industry is approaching a time when a thorough and common understanding of the difficulties and problems confronting the employers, operatives and foremen is most necessary if an amicable and equitable settlement is to be reached. On Monday evening many of the most prominent officials of the various organisations sat round a common table and the atmosphere of good fellowship which prevailed throughout the evening was indicative of the good spirit in which negotiations are being conducted. During the proceedings some remarkable tributes were paid to Mr. Brown. A report of the celebrations will be found on page 1052.

Memorial Tablet in Norwich Cathedral.
By Miss Maidie Buckingham.

GENERAL NEWS

CHRISTMAS HOLIDAYS.

Owing to the Christmas Holidays, all editorial correspondence intended for our next issue should reach The Editor by first post on Monday, December 22.

Professional Announcement.

On and after December 25 the office address of Mr. T. R. L. Gibson, District Surveyor for Lewisham East, will be 7, Princes-road, Lewisham, S.E.13. The telephone number remains the same: Lee Green 1507.

An Architect's Estate.

Mr Edward Hewitt, F.R.I.B.A. (71), of Canford Cliffs, Bournemouth, left £25,540 (net personalty £24,480).

Discovery at York Minster.

The foundations of the apse of an unrecorded Saxon church of the eighth century have been discovered beneath the choir of York Minster during the removal of part of the pavement of the crypt.

The Glover Travelling Studentship, Newcastle.

At a meeting of the Northern Architectural Association, in Newcastle, it was announced that the Glover Travelling Studentship awarded by the Association had been won by Mr. F. A. C. Mounder, Darlington, a student of the School of Architecture, Armstrong College.

Australia and the R.I.B.A.

The President of the R.I.B.A. has received the following cablegram from the President of the Royal Australian Institute of Architects:—"First annual meeting of Royal Australian Institute of Architects at Melbourne sends greetings to Mother Institute of Empire.—BLACKETT, President."

New Welbeck Mansion.

Plans for the erection of a mansion in Welbeck Park for the Marquis of Titchfield, M.P., elder son and heir of the Duke of Portland, have been approved by the Worksop Rural Council. The plans have been prepared by a York architect, and the house itself, which will be situated in the Great Park on the Welbeck estate and hard by the golf links, will command on all sides charming views typical of Sherwood Forest and the Dukeries. It will be built chiefly of brick, very little stone being used.

Carnarvonshire C.C.: Architect's Department.

A scheme for the formation of an architectural department has been adopted by the Carnarvonshire County Council. It was recommended that Mr. Westbury Lloyd Jones, at present part-time officer of the Education Committee, be appointed county architect at a salary of £500 a year; that a first assistant architect be advertised for at a salary of £350; that Mr. W. T. Ellis, assistant in the county surveyor's department, be transferred to the architectural department as second assistant at a salary of £250; that Mr. Hugh Parry, the present clerk of works to the Education Committee, be appointed to the architectural department at his present salary of £350.

Apprenticeship in the Plumbing Trade.

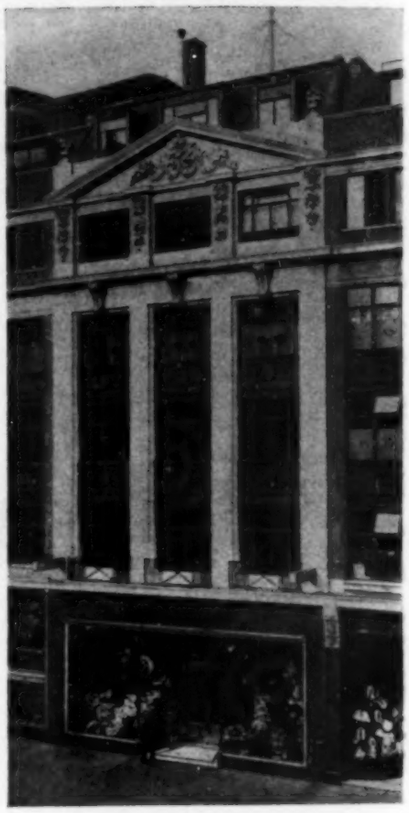
We understand that in December, 1929, a circular letter was sent out by the Plumbing Trades Central Apprenticeship Council for London, asking for information regarding the classes which students were attending, and at what technical school, and whether there were any suggestions or communications to be made in reference to the general training under the scheme, whereby the education of students as plumbers might be more effective. A large number of replies were received, mainly in the sense that everything was being done to encourage the apprentices in their training. On page 1052 we publish a résumé of recent efforts to revive apprenticeship in the plumbing trade.

Restoration at Fulham Palace.

The repair of the historic and ancient Fulham Palace, which is now proceeding under the orders of the Ecclesiastical Commissioners, has brought to light an unexpected discovery. In the course of the work the remains of the original oak Tudor oriel window at the second floor level of the tower over the front entrance were discovered. These had been covered with modern brick facing and the dial of the clock fixed in front of it. Below the dial a 17th century stone cartouche, which had no connection with this portion of the building had been fixed. The portions of the oak oriel window remaining were sufficient to enable the whole to be reconstructed by Messrs. Caroe and Passmore, in accordance with the original detail and this has been done. The modern brick parapet of the tower was taken down, and reconstructed in such a manner as to harmonise with the rest of the building, the clock was restored to its original position in the turret and the stone cartouche was refixed on the east wall of the courtyard. A sketch of the reconstruction is shown on page 1032.

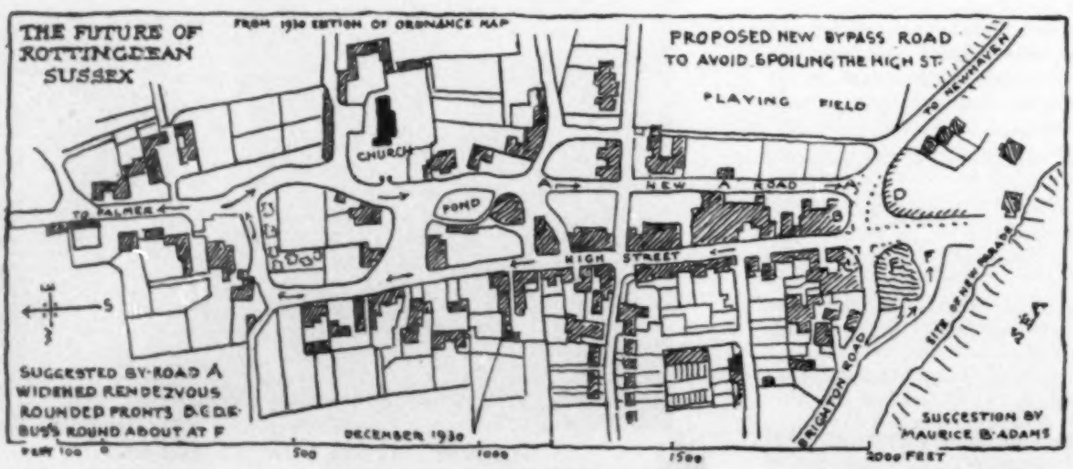
Strength and Defence in Architecture.

Sir Banister Fletcher, P.R.I.B.A., gave a lecture at the Central School of Arts and Crafts on Wednesday last dealing with French mediæval fortified towns, castles, country houses, hôtels-de-ville, palaces and hospitals, which, he said, involved the study of a different aspect of social and political life from that called forth by the cathedrals and churches. Whereas cathedrals such as Amiens, Chartres and Rheims were largely built by the people for their own use as citizens, castles were the well-nigh impregnable fortresses of a proud and exclusive nobility, while fortified towns testified to the military necessities of those days which demanded stone-built fortifications. The lecturer pointed out that mediæval architecture was not confined to ecclesiastical buildings only, but was invariably employed in the many secular buildings which were constructed. The public buildings reflected the enterprise and pride shown by the citizens erecting beautiful structures in which their disputes should be adjudged, their municipal affairs settled, and their aged and infirm housed, and much exuberant ornament was lavished on these characteristic structures, which stood as monuments of a high order of craftsmanship and art.



New Business Premises, 144-150, Victoria Street, S.W.

MESSRS. J. STANLEY BEARD & CLARE, F. & A.R.I.B.A., Architects.



(See page 1037.)

CORRESPONDENCE

Architects' (Registration) Bill.

SIR,—It may be remarkable, but it is nevertheless a fact, that very few architects have anything but the haziest notion as to the provisions of the Registration Bill. Thus, in at least one recent meeting of architects in the provinces, reckless statements having reference to the Bill were made by the speakers, who can produce no foundation for them. Either these statements were made in ignorance or for the purpose of intimidating the "unattached."

It is true that the Bill has received a second reading and has been remitted to a Standing Committee—but the Bill is not yet law and may never become law in its present form. It should be borne in mind that the Bill, as drafted, is a permissive and not a compulsory measure; that is to say, asuming the Bill were passed in its present form, an architect need not go on the register. He can still practise as an architect and call himself "architect." In fact, the Bill will not prevent the quack from calling himself an architect; he can practise as an architect, undercut the fees of the genuine architect, advertise and tout for work, and generally eschew rules of professional conduct without let or hindrance. Pains and penalties are reserved for "registered" persons, who will pay for the "privilego" of being registered.

In the opinion of my Council, it is the title "architect" that should be safeguarded, and a Bill that does not provide for such protection is useless to the architectural profession and the public served by that profession.

Architects are being asked to write to Members of Parliament inviting the latter to support the Bill. May I suggest that architects first make themselves acquainted with the provisions of the Bill and then insist that the title "architect" be reserved for those who are qualified to use it?

G. B. J. ATHOE,
Secretary,
The Incorporated Association of Architects and Surveyors,
Wilbraham-place, S.W.1.

[While we agree with Major Athoe that the Bill does not appear to provide for the protection of the qualified architect, it should be mentioned that the last Parliament refused to "safeguard" the title "architect."—ED.]

The Future of Rottingdean, Sussex.

SIR,—The article of mine published in your issue of the 5th inst. under this heading, with sketches of old Rottingdean, should ultimately serve its purpose of saving the amenities of the village, and specially its old High-street, if you would reproduce the accompanying plan of the place which is taken from the 1930 edition of the Ordnance Map of the district. It is altered so as to show my suggestion of a by-road to enable the motor traffic on "the one-way principle" to serve every purpose efficiently without interfering with the charming old-world character so desirable to preserve. My proposal is very inexpensive, simply providing a by-pass alongside of the playing fields behind the High-street premises and cut through their back yards and old path, where a new open frontage can so well be obtained with easy access for trading purposes. I suggest rounding off the corners of the end buildings at the High-street southern extremity so as to give better traffic space and a good rendezvous. The hotel next to the seafront will need rebuilding in any event. An eminent architect, an old friend and fellow-townsman of mine, wrote to me after reading my article urging the advantage of demonstrating by a plan how an alternative to the proposed scheme interfering with the High-street would help more conclusively than any criticism, and, at any rate, it might furnish a practical as well as unobtrusive abridgment solving the problem. I have adopted his advice, but inasmuch as he has left for a voyage since I received his letter, I cannot have the further advantage of his opinion on this proposed solution, consequently it must speak for itself. Other letters have reached me supporting the view which I ventured to advocate.

MAURICE B. ADAMS, F.R.I.B.A. (Retired.)

Restoration in France.

SIR,—Although hundreds of millions of francs have been spent on the so-called preservation of ancient buildings in France, many wonder if this has really been a blessing. In too many cases ancient work has been completely destroyed, and rebuilding has taken place.

A careful examination of such a beautiful cathedral as that at Chartres reveals that there has been a great deal of new stone work introduced, and the noted rose window in the South Transept entirely renewed. The romantic exterior of Périgueux Cathedral has been scraped. The Romanesque west front and the towers of Clermont-Ferrand Cathedral were demolished in 1855, and a new front built up, imitating the style of the 13th century. At Limoges the surviving bay of the Romanesque nave was pulled down during the last century and an unsightly porch added on.

At Nimes there may have been some reason for entirely rebuilding the cathedral, which had become undermined during the Religious Wars of the 16th and 17th centuries. When it was rebuilt in 1881 it was wisely decided to retain the fifteenth-century vault *in situ*.

One of the best examples of spoiling a building may be found in the case of the church of St. Martin D'Ainay at Lyons. Here there was a pagan building and upon it was erected a Christian Church in the 9th century. A thousand years later the ancient walls were cut in order that great aisles might be added to each side of the nave. As a result, the proportions of the ancient west tower were ruined. The walls had to be raised in order to provide more light.

Even Roman work has suffered from preservation. Many visitors to France know well the Roman Theatre at Orange. Here, in 1841, the auditorium was cleared and a hundred houses that had been built within were compulsorily bought out and demolished. The greater number of the 7,000 seats now available are restorations. The Corinthian columns of the Roman Arch at Orange have also suffered as a result of the craze for restoration, for old stones were cut away and new blocks inserted. In the Roman arena at Nimes much of the vaulting, the arcades and the stone seats are modern.

It will be seen, therefore, that France, like Great Britain, has not been treated too kindly by those who are anxious to care for her antiquities. But, on the other hand, the appointment in 1834 of a General Inspector of Ancient Monuments in France has had many valuable results. Most accurate and carefully prepared records of every building of note as it was before "restoration," have been preserved in the libraries of the Historic Monuments Commission. Thus France has an invaluable record, whereas, in this country, individual architects work their will independently.

Partly the difficulty here has been that we were too rich as compared with the more thrifty French and subscribed too liberally to church restoration. Thus, over £100,000 was spent in Queen Victoria's day on the refacing and restoration of the Cathedral of Worcester. We have much to learn from the Commission of Historic Monuments in France, which has now acquired nearly a hundred years' experience.

OBSERVER.

The Proposed Rebuilding in Whitehall.

SIR,—Influential protests have been made against the encroachment on the gardens that the above proposal will involve, particularly against bringing forward the Embankment building line beyond that of Whitehall-court. To preserve the amenities of the district it would be preferable to leave the existing buildings (they provide a good deal of accommodation) and build merely for the additional officials elsewhere. This also, I believe, would be the most economical plan. The new building would be much smaller than if required to take the existing staff as well as the additional, and might be erected somewhere where land is cheap.

It seems a fine opportunity for starting a new garden city; the new buildings might form the nucleus. Many Ministers of the Crown have emphatically stated their approval of the garden city movement, but none, as far as I am aware, has done anything to further it. There is now a splendid opportunity. With so much business done on the telephone there is no reason why all Government offices should be in Whitehall. A commencement in decentralisation was made thirty years ago when the Savings Bank was moved to Kensington. It seems a pity that it was not moved farther out.

W. J. H. LEVERTON, F.R.I.B.A.

Guildford Cathedral Competition.

SIR,—Your leader in *The Builder* for September 19 on Guildford Cathedral Competition induces a few remarks, though these will not reach you till after the closing date. I noted when the advertisement appeared that it was practically the same as that for Liverpool Cathedral, in October, 1901, a competition which I well recall.

Fears in many directions in regard to that competition were far more pronounced than any I have come across regarding Guildford, and it is now a matter of history how fully those fears proved groundless. Some 103 competitors responded, of whom 16 were outside the United Kingdom, resulting in most, if not all, of the recognised Gothicists of that day in Great Britain and Ireland and several in America sending in portfolios of executed work or designs—dream designs, as you term such. In that list (in alphabetical order) were Hippolyte Blanc, J. Brooks, Son and Godsell, J. Burnet and Son, W. D. Caröe, Basil Champneys, Cram, Goodhue and Ferguson, H. C. Corlette, Eastwood and Greenslade, Sir Thomas Drew, Temple Moore, C. A. Nicholson, Paley and Austin, H. A. Prothero, G. H. Fellowes Prynne, A. H. Skipworth, Leonard Stokes, A. E. Street, and W. J. Tapper. And what were the consequences? For the encouragement of the unknown who have sent in portfolios, it may be recalled that of the five selected for that final competition, only two were selected from those who could justly claim great experience in ecclesiastical architecture—viz., Paley and Austin and W. J. Tapper, though C. A. Nicholson had done a good deal of such work, but neither Malcolm Stark nor Giles Gilbert Scott had really done anything to show beyond what they had put on paper in "dream designs."

So, after all, I think it can be safely said that the judgment of to-day in regard to Guildford will prove to be in line with that of Liverpool nearly thirty years ago; and that designs solely on paper, whether of known or unknown authorship, will have as excellent an opportunity as reputation or examples of executed work. Very singularly in that issue of September 19 you illustrate the design for the new Roman Catholic Cathedral at Liverpool by Sir Edwin Lutyens, a striking instance of a great ecclesiastical work being entrusted directly to one having had no experience in that direction. As a competitor of long standing, my experience is that in the interests of architecture no method of selection has all the advantages; yet to my mind the promoters of the Guildford competition conferred additional promise upon their scheme, beyond that of Liverpool, in not stating the number that would be selected. Trusting these remarks will arouse hopefulness in all the "unknown."

WILLIAM LUCAS.

East Melbourne, Australia.

A CUBIST ARCHITECT

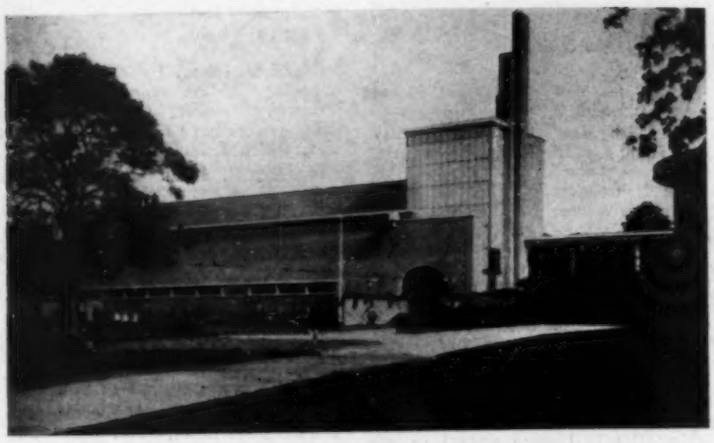
SOME RECENT SCHOOLS AT HILVERSUM BY W. M. DUDOK.

By J. N. SUMMERSON, A.R.I.B.A.

THAT architecture is the natural destination of cubism is a truth which is being clearly demonstrated in the work of a number of modern architects on the Continent. While painters have, more or less definitely, abandoned their experiments with geometrical form, architects have taken up the pursuit of the abstract, showing the world how beauty of formal relationship may be revealed in the composition of such commonplace things as factories, schools, offices, tenements, power-stations—in fact, every kind of building which a present-day architect may be called upon to design. Of course, for years, architects here and there have had vague notions about squareness. In the 'sixties Alexander Thomson, of Glasgow, was stressing the quality of mass in his queer Graeco-Egyptian manner, and thirty years later his fellow-townsman, C. R. Mackintosh, gave more emphatic expression to the same dimly-discerned principles. Mackintosh's work was a voice crying in the wilderness; but beyond the North Sea that voice was heard and understood. In Holland, where the way for modernism was being prepared by the sympathetic labours of Cuypers and Berlage, the Scotsman's influence took root and the modern school of Dutch architecture eventually came into being. After the War this school produced some fine work. The influence of Frank Lloyd Wright succeeded that of Mackintosh, and although there was a certain amount of eccentric detailing, there was also much really original composition and thoughtful design. But at first, cubism only manifested itself in a tendency towards logical asymmetry and in a general feeling of squareness. The Paris Exhibition of 1925, however, indicated further lines of development, and shortly after that event several architects threw off the remaining shackles of stylistic handling and became geometricians pure and simple.

Picasso has been taxed with responsibility for many things, modern architecture included. And there is probably some justice in this, although in the case of architecture the connection is obviously rather remote. We are told that the great cubist painter does not wish to acknowledge relationship with any of the movements going on round about him, and the architects, on their part, certainly admit no school of painting as their source of inspiration. The truth is simply that the impulse of modern culture, informing various manifestations of artistic activity, leads to results which, in the visual arts, have fairly obvious affinities with each other.

The recent buildings of M. Dudok are *cubist* architecture in the sense that they aim at expression through the co-ordination of geometric shapes. Symmetry has been thrown to the winds and the form is controlled, not by a vague sense of the picturesque, nor yet by the uncompromising utilitarianism advocated by le Corbusier, but by precise and subtle design in three dimensions. Three-dimensionalism is the keynote of all Dudok's architecture. If you go up into the great tower of his half-finished Town Hall at Hilversum and look down on the complex pattern of flat roofs, you will see at once how each unit in the design is related to the whole, and how the entire building is an elaborate counterpoint of cubes, cylinders and prisms. In the same way, the Hilversum schools (which make up the bulk of Dudok's practice) are compositions in solid geometry where each major element in the design is clearly articulated and where the only adventitious aids to effect are provided by the colour and texture of the materials employed.



School in Schutters-Weg, Hilversum.

M. W. M. DUDOK, Architect.

The somewhat ascetic attitude with which Dudok approaches the problem of architectural expression results in a dramatic intensity of purpose, pervading the design of all his buildings. Imagine for a moment a typical Classic building, designed upon a conventional axial plan-shape, giving symmetrical elevations. Here the eye takes in the whole intent and purpose of the composition at once; all interest radiates from the centre of gravity and prolonged examination only reveals minor subtleties in the "working up" of subordinate detail. Then look at one of Dudok's Hilversum schools. Here we are made to feel that every single line in the building has vital *relative* significance; it seems as if nothing could be added to, or detracted from, the design without disturbing the rhythmic unity of the pattern. Take, for instance, Dudok's use of flagstaffs. The traditionalist inevitably places his flagstaff on an axial point; usually above the principal entrance or in some place where it merely falls in with a composition which is already balanced. But Dudok makes a flagstaff do more than this. By carefully-considered placing, he makes it an essential element in the design. In the Schuttersweg school, for instance, the white flagstaff appeals to the eye as a necessary echo of the emphatic lines of the staircase-hall and chimney-stack, modifying the abrupt vertical opposition of these features to the strong horizontality of the wings.

That is characteristic of the art of Dudok. To him a building is not a machine; neither is it a subject for architectonic embellishment. It is simply an aggregate of geometrical units which by infinitely careful adjustment may be wrought into an æsthetic unity. He is endowed with an exquisite sense of form, and this has enabled him to avoid many of the trite mannerisms current in modern Dutch architecture. Each of his buildings marks an advance upon his previous work and the ruthless severity of his newest school, in the Prof. Lorentz-weg, makes one wonder in what direction his active imagination will lead him, when no further simplification is possible. Meanwhile, the work which he is producing at the moment ranks high among the achievements of modern architecture, and there is every indication that we may expect still finer things from him in the future.

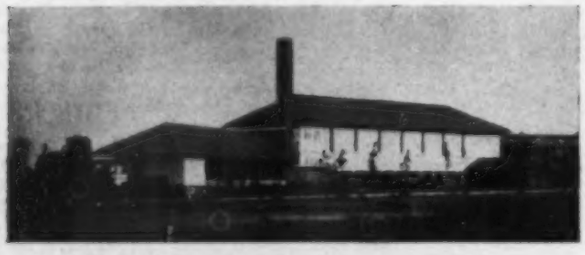
"THE BUILDER" DEBATE

XXXV.—REPETITION OF DESIGNS.

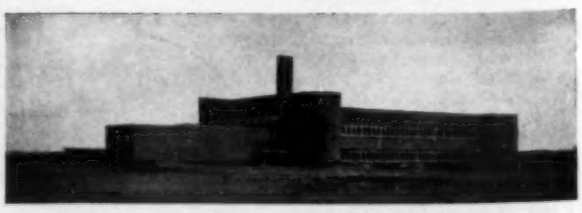
SIR,—I appreciate that interest in a debate can hardly be maintained unless the parties assume their most provocative tone. But there are surely limits to this more or less assumed partisanship, and when one party closes his case with the assurance that he really did not mean all he previously said, much of the savour has departed from his argument.

"Positive" took the standpoint that the permitted use of architects' special designs for stock repetitions should be the general practice, or so I understood him. If this was not his case, and he meant this only to apply in rarely met cases, then I cannot see the purpose of the debate, because there is nothing other than expediency to preclude such arrangements being mutually agreed in the particular case.

The scorn he pours upon the "snobs" who lose interest in the unique when it comes in general use is somewhat unreasonable. Surely the rarity of many of the precious metals is one of their chief attributes to value. I wonder for how long our *débutantes* would display diamonds if the ubiquitous

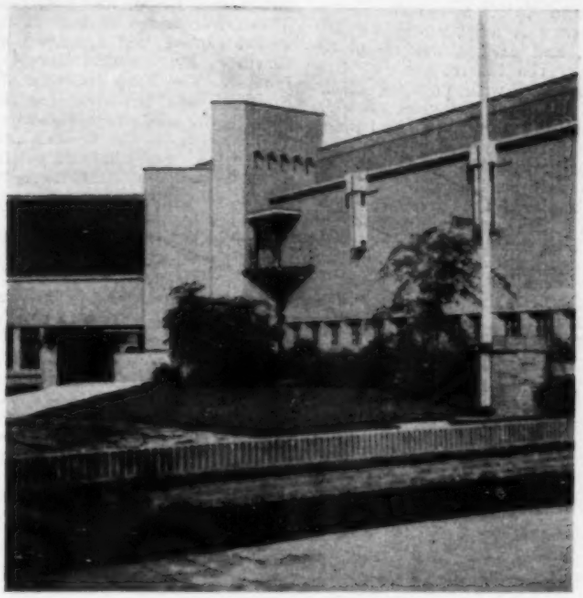


School in Sumatra-Laan, Hilversum.



School in Prof. Lorentz-Weg, Hilversum.

M. W. M. DUDOK, Architect.



Juliana School, Hilversum.

firm which "Positive" mentions were selling them at sixpence a bag? Or for how long kings would wear a crown of gold if we were making railway engines of the same metal? Snobs? Perhaps, but surely we have all the same quality in us.

"Positive" is anxious to improve the standard of design of stock articles. I suggest, if this is a generally sincere desire of the manufacturers, they have the remedy in their hands. Architects will be delighted to design fittings for them, and the only disadvantage they will find from employing architects' services as against the system suggested by "Positive" is that they will pay the architects instead of having that trifle of duty carried out for them by the architects' clients. From what I know of manufacturers, they will know very well how to recover that expense.

NEGATIVE.

SIR,—I do not quite see the point of "Positive's" suggestion. If a client wants a specially designed fitting, he will surely be willing to pay for it, and yet if it is a specially designed fitting he wants, he will not want it to be repeated *ad nauseam*. There seems no reason why an architect should desire to get such a fitting at the price of a stock article. He is always anxious to do the best he can for his client, but surely not at the cost of making a present of his inventive taste to the manufacturer in whom he has no interest at all. It is true that "Positive" admits the justice of a royalty in such cases, but what is there to prevent such an arrangement being made under present circumstances if the client will consent?

PRACTICE.

SIR,—I think "Positive's" suggestion is a useful contribution to the cause of modern standards of taste. I am sure the client for whom a fitting is designed will appreciate the fact that this was the first of the type to be made, and will be rather flattered than otherwise when the design comes into general use. With regard to the payment of a royalty to the designer, there seems no possible objection to the practice, assuming naturally that the consent of the client is first obtained. There is no doubt that more people would avail themselves of the individual taste of their architects, and fewer would content themselves with indifferently designed stock articles, if the manufacturers had this means at their disposal of continually adding to the variety of their stock.

ONLOOKER.

ROYAL ACADEMY SCHOOLS

THE following is a list of prizes and prize-winners in the Royal Academy Schools competitions:—

Landscape Painting.—"A Scene in a Park"—1st Creswick Prize (£25) and Silver Medal, Audrey Brenda Moore; 2nd Creswick Prize (£10) and Bronze Medal, Walter Goodin.

Design in Monochrome for a Figure Picture.—"The Death of Ananias"—1st Armitage Prize (£30) and Silver Medal, Michael James Mounsey; 2nd Armitage Prize (£20) and Bronze Medal, Dorothy Mary Barber; 3rd Armitage Prize (£10) and Bronze Medal, Arthur George L. Mackenzie.

Design in Water Colour for the Decoration of a Portion of a Public Building.—"Decoration of the Staircase Wall of the Hall of Euston Station"—1st Landseer Prize (£30) and Silver Medal, Marjorie Victoria O. Morris; 2nd Landseer Prize (£10) and Bronze Medal, Dorothy Audrey C. Mais.

Composition in Colour.—Prize (£5) and S. J. Solomon Silver Medal, Madeleine Edith Robinson.

Cartoon of a Draped Figure.—"St. Francis Feeding the Birds"—Landseer Prize (£25) and Silver Medal, Diana Beatrix L. Pullinger.

Two Paintings of a Figure from the Life.—1st Landseer Prize (£20) and Silver Medal, Audrey Brenda Moore; 2nd Landseer Prize (£10) and Bronze Medal, Madeleine Edith Robinson.

Portrait Study of a Lady in Evening Dress showing Arms and Hands.—Arthur Hacker Prize (£30) and Silver Medal, Evelyn Houghton; additional (R.A.) Prizes: (£10), Audrey Brenda Moore; (£5), Agnes Elisabeth Charles.

Two Paintings of a Head from the Life.—Arthur Hacker Prize (£20) and Silver Medal, Diana Beatrix L. Pullinger; additional (R.A.) Prize (£5), Audrey Brenda Moore.

Set of Four Drawings of a Figure from the Life.—1st Prize (£10) and Silver Medal, Marjorie Joan Earnshaw; 2nd Prize (£5) and Bronze Medal, Vera Evelyn Brookman.

Set of Three Drawings of a Head from the Life.—Prize (£5), Vera Evelyn Brookman.

A Painting from a Cast.—1st Landseer Prize (£10), Vera Evelyn Brookman; 2nd Landseer Prize (£5), Agnes Elisabeth Charles.

Drawing from the Antique.—Prize (£5) and Silver Medal, Agnes Hilda Swift.

Pencil Study of a Landscape Foreground.—Duff Greet Prize (£10) and Silver Medal, Ian Robert Fleming-Williams.

Model of a Design of a Subject combined with Architecture.—"The Entrance to a Town Hall"—Edward Stott Scholarship of £50, tenable for one year, and Silver Medal, Doreen Winifred Shimwell.

Two Models of Busts from the Life.—1st Landseer Prize (£20) and Silver Medal, Not Awarded; 2nd Landseer Prize (£10) and Bronze Medal, Doreen Winifred Shimwell.

Model from the Antique.—Landseer Prize (£10) and Silver Medal, Muriel Blanche G. Hiley.

Model of a Medal or Coin.—"A Medal to Commemorate the Naval Conference"—Prize (£10) and Silver Medal, Doreen Winifred Shimwell.

Set of Three Models of a Figure from the Life.—1st Landseer Prize (£30) and Silver Medal, Sheila Esther Khan; 2nd Landseer Prize (£20) and Bronze Medal, Erica Mildred White.

Design in Architecture.—"A Painter's House and Studio"—Travelling Studentship of £60 (England), tenable for one year, and Silver Medal, Henry Collingwood Farmer.

Set of Measured Architectural Drawings.—"The Orangery, Kensington Gardens"—1st Landseer Prize (£10) and Silver Medal, Graham Alasdair MacDonell; 2nd Landseer Prize (£5) and Bronze Medal, Ellis Jerden Cook.

An Architectural Design.—Landseer Prize (£20) and Silver Medal, Walter Edmund Troke.

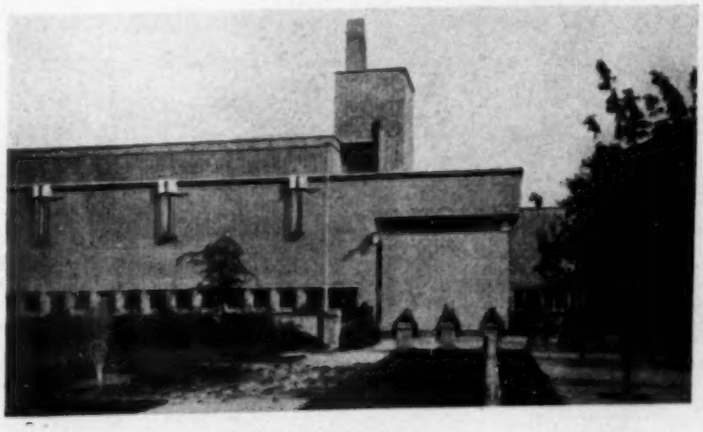
An Architectural Design.—1st Prize (£10) and Silver Medal, Douglas Mawson Cook; 2nd Prize (£5) and Bronze Medal, Cecil James Parker.

Landseer Scholarships in Painting and Sculpture, of £40 a year each, tenable for two years, awarded—in Painting to John F. Bourne, Walter Goodin, Joan Hassall and Kathleen M. Sheppard; in Sculpture to Sheila M. Khan.

John Crompton Scholarships in Painting, of £50 each, tenable for one year, awarded to Madeleine E. Robinson, Kathleen M. Williams and Leighton H. Woollatt.

Persian Art.

At the suggestion of the organisers of the International Exhibition of Persian Art which will be held at Burlington House in January and February, 1931, the Council of the Royal Institute of British Architects have arranged a public lecture on Persian Art to be given at the R.I.B.A., 9, Conduit-street, W.1, on Thursday, January 15, 1931, at 5.30 p.m. Mr. Arthur Upham Pope, one of the directors of the International Exhibition, has kindly consented to deliver the lecture, which will be fully illustrated by lantern slides. Members of the public are cordially invited to attend.



Juliana School, Hilversum.

M. W. M. DUDOK, Architect.

ILLUSTRATIONS

PLATES.

"A Painter's House and Studio."

This design, by Mr. H. C. Farmer, has been awarded a Travelling Studentship of £60 and Silver Medal in the Royal Academy Schools competitions, a note on which is given on page 1034. The full list of awards appears on page 1039.

University of Western Australia.

This design was awarded the first premium in an open competition. The buildings will be faced with a soft limestone, the dressings being of a harder stone of a warm sand colour. The roof is to be of Spanish tiles, and the clock face and tympani of the Senate-room arch will be in glass mosaic. The cost of the work will be about £180,000. A perspective view of the buildings, exhibited at the Royal Academy, was published in our issue for August 30, 1929. Further illustrations will be given next week.

Messrs. Alsop and Sayce are the architects.

Leicester-square Theatre.

The promoters of this theatre, headed by Sir Walter Gibbons, have aimed at providing a house equipped for all types of entertainment. Although the site can be called an island one, there is no single clear front on any side, and the planning of entrances and exits was no easy task. Moreover, the promoters required the main part of the most important front facing the Square to be devoted to an independent block of offices and a large private flat, in addition to office accommodation in connection with the theatre itself. Dressing-room accommodation and artistes' rooms as well as accommodation for the numerous arts and crafts connected with theatrical production have also been fully provided. Lift accommodation has been planned to serve all artistes, both chorus and principals, from stage level to all floors. The stage itself is fully equipped with all latest mechanical and lighting devices, including hydraulically controlled platforms, and can be adapted for the presentation of every type of theatrical or cinema entertainment. The orchestra pit provides space for full orchestra and can be raised by hydraulic control to stage level; there is also an independent moving platform for the organ console. The theatre provides accommodation for 2,000 people, and every seat has an uninterrupted view of the stage and is within easy hearing range of the spoken word of the stage. A feature of the house is the provision of sixteen private boxes. The entrance halls, foyers, and stairs are ample in number and planned on generous lines. Every part of the house has its own foyer and refreshment buffet. The exterior is modelled in a light classical manner, and carried out in white glazed terra-cotta, the theatre part of the building being marked with polished black marble entrance and steel and glass canopy. Above, the façade consists of tall fluted piers carrying a strong cornice with attic story and pediment over. Within the piers and cornice are tall arch-headed windows, over which has been placed a wrought-iron advertising grille. The office buildings on either side have been designed on simple lines to harmonise with the main pavilion. The auditorium treatment is based on early Renaissance models, freshly treated and with a warm colour treatment carried out in tones of brownish purple, reds, greens and silver gilt.

Messrs. Gee, Walker and Slater, Ltd., were the general contractors, and the following were sub-contractors :—Smith, Walker, Ltd., steelwork; Troughton and Young, Ltd., electrical work; Leeds Fireclay Co., exterior facings; G. N. Haden and Sons, Ltd., heating engineers; Comyn, Ching and Co., Ltd., canopy and exterior metal work; Morris Singer Co., metal windows and interior decoration; Battiscombe and Harris, Ltd., interior decoration and painting; L. Lumley and Co., soda fountains; B. Holden and Co., carpets; W. W. Turner and Co., Ltd., seating; J. Holliday and Sons, curtains; J. Frank Brockliss, Ltd., projector equipment; Western Electric Co., sound installation; Roberts, Adlard and Co., roof tiling; Wurlitzer Organ Co., organ; Art Marbles and Mosaic Co., marble work; Automatic Sprinkler Co., Ltd., sprinkler installation; British Vacuum Cleaner Co., vacuum cleaning plant; Carron Co., sanitary fittings; Faience and Tile Crafts, Ltd., interior tiling; Gimson & Co., Ltd., counterweighting gear; J. W. Gray & Son, lightning conductor; Thaddeus, Hyatt & Co., pavement lights; C. Isler & Co., Ltd., artesian well; Marryat & Scott, Ltd., electric lifts; Hydraulic Engineering Co., hydraulic lifts; Merryweather & Sons, fire curtain and sparge pipe; Potter, Rax Gate Co., lift enclosure.

Mr. Andrew Mather, L.R.I.B.A., is the architect.

A Floral Showroom.

In 1926, Allington House, at the corner of Victoria-street and Allington-street, was erected to the designs of Mr. J. Stanley Beard, F.R.I.B.A., and in 1928 this building was extended further westwards, Messrs. Moyses Stevens, florists, having acquired Nos 144-150, Victoria-street; and Ebury House, to the design of Messrs. J. Stanley Beard and Clare, has just been completed. This latter design carries on the same lines as the former, but a central stone pavilion serves as a prominent feature in the whole scheme. The shop front to Messrs. Moyses Stevens' new premises has been designed to give the maximum amount of glass area for the display of flowers, and is carried out in blue pearl granite, with "Staybrite" steel ornamental architrave and entrance doors.

The main showroom is 95 ft. long and 30 ft. wide. Particular attention has been paid to the wall treatment, so that a suitable background for tiers and banks of flowers is obtained. The walls are lined with Subiaco marble, with Travertine pilasters and black marble skirting.

The introduction of mirrors breaks up the long length of walling, and these have been designed with Travertine marble band as an architrave to the moulded bronze frames around the mirrors themselves. Specially designed bronze grilles are introduced into the corners of the mirrors, these being required for ventilation purposes. The floor is covered with Travertine marble in large squares, and the showroom obtains its natural light through a laylight in the centre of its length.

The general contractors are Messrs. Bovis (1928), Ltd., the steelwork engineer, Mr. J. F. Farquharson, M.I.Struct.E.; and the electrical consulting engineer, Mr. W. C. C. Hawtayne, M.I.E.E.

The sub-contractors are as follows:—Dorman Long and Co., steelwork; South-Western Stone Co., Ltd., stonework; Mr. E. R. Broadbent, stone carving; Crittall Manufacturing Co., Ltd., ornamental windows; J. Whitehead and Sons, marble work; J. Whitehead and Sons and Art Pavements, Biancola dados; G. N. Haden & Sons, Ltd., heating and ventilation; John Richards and Co., Ltd., electric light; Matthew Hall and Co., Ltd., plumbing and sanitary fittings; E. Pollard and Co., shop-front; The Birmingham Guild, bronze mirrors and showcases; Arthur Searle and Co., ornamental plasterwork; Haywards, Ltd., lantern lights and pavement lights; F. A. Norris and Co., iron staircases; F. Bradford and Co., hollow tile floors and roofs; W. T. Allen and Co., ornamental railings.

The London-Inverness-shire Association.

We learn that Mr. J. E. Rhind, A.R.I.B.A., has been elected hon. secretary of this society, and that this is the first time an architect has occupied the position.

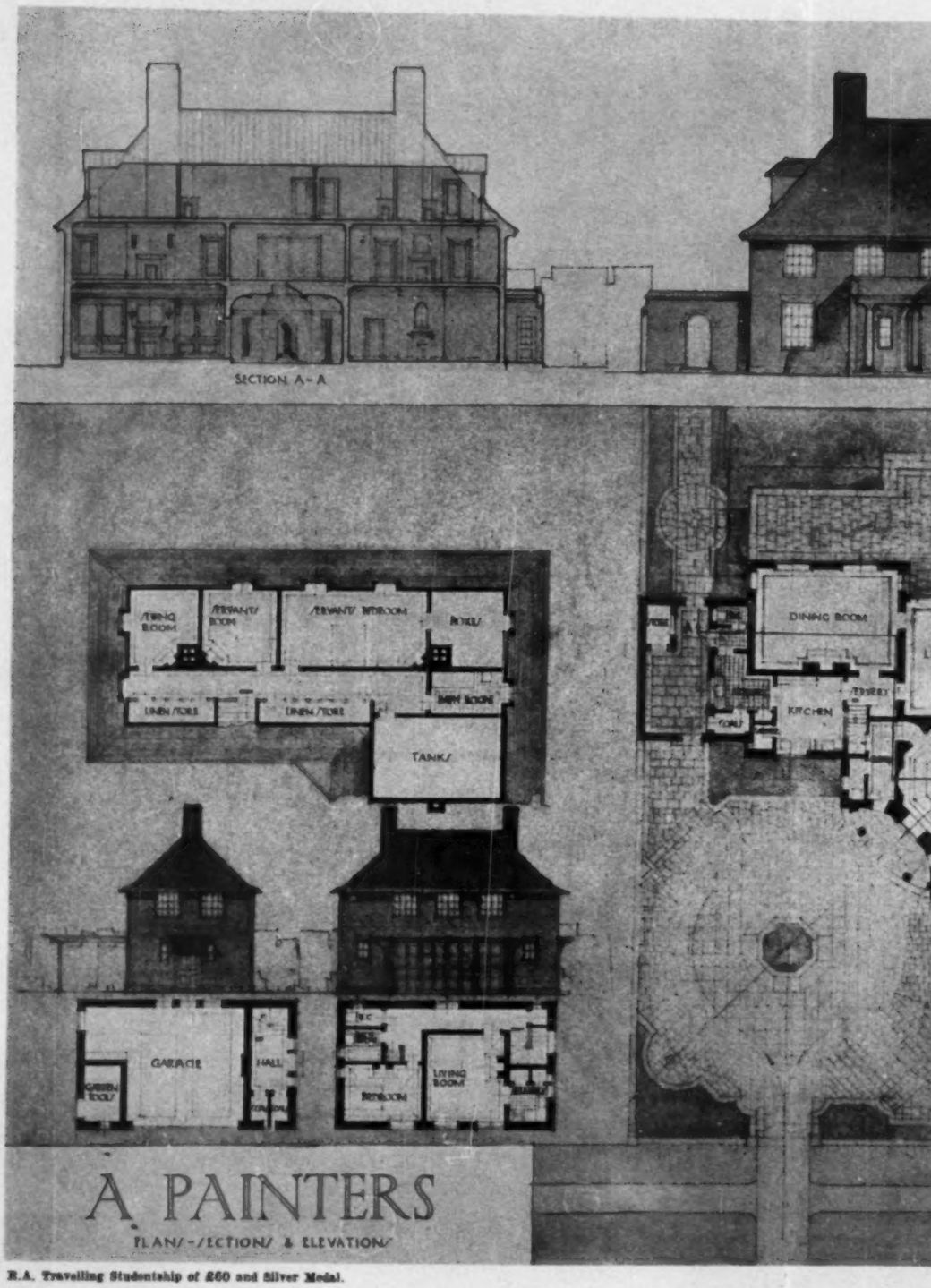
The Leicester Square Theatre, W.C.: Buffet.

MR. ANDREW MATHER, L.R.I.B.A., Architect.

R.A. Travelling Studentship of £60 and Silver Medal.

"A Painter's House and Studio": Winning Design.

By Mr. Henry Collingwood Farmer.



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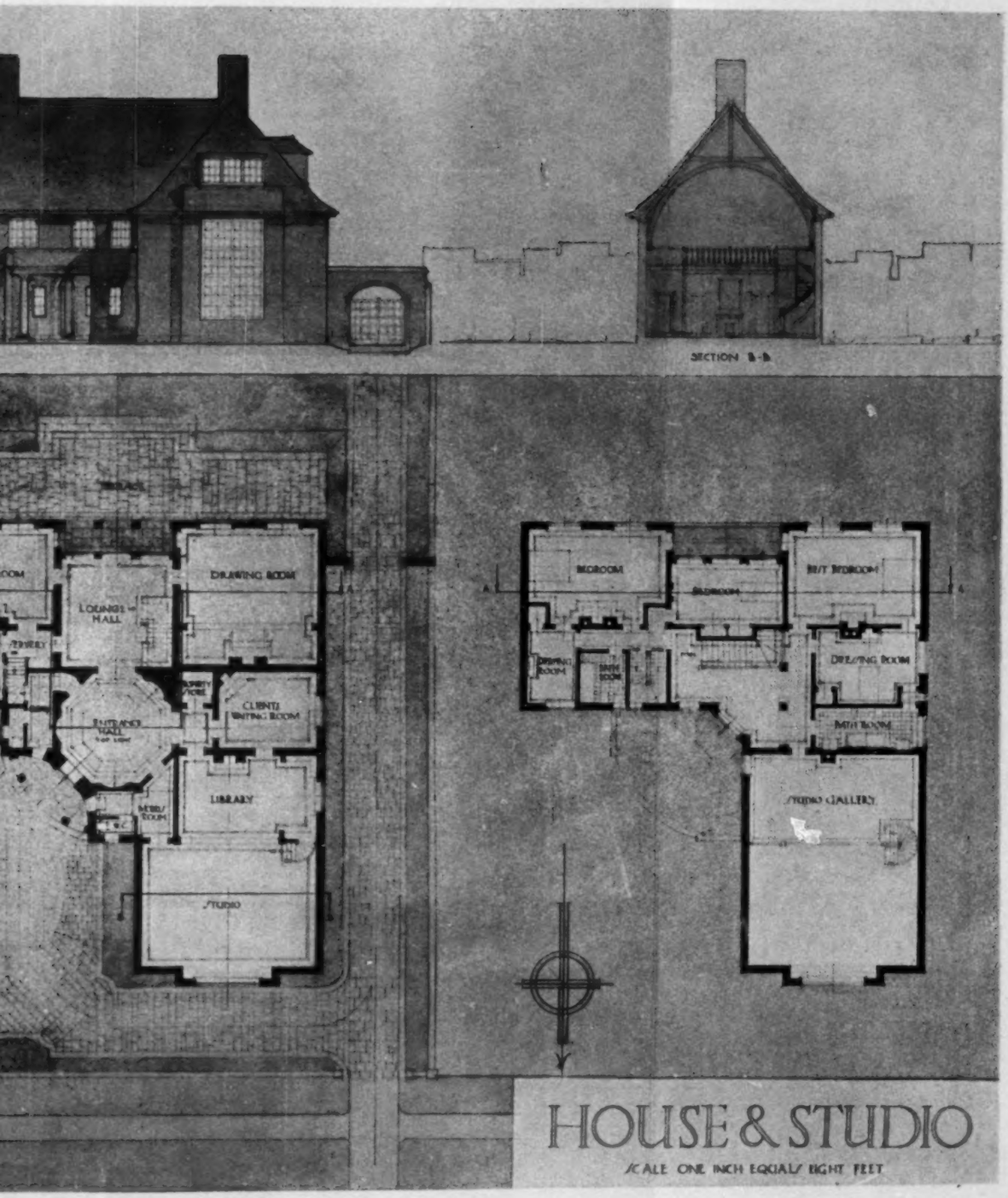
"A Painter's House" and

By Mr. Henry C



House and Studio": Winning Design.

Mr. Henry Collingwood Farmer.

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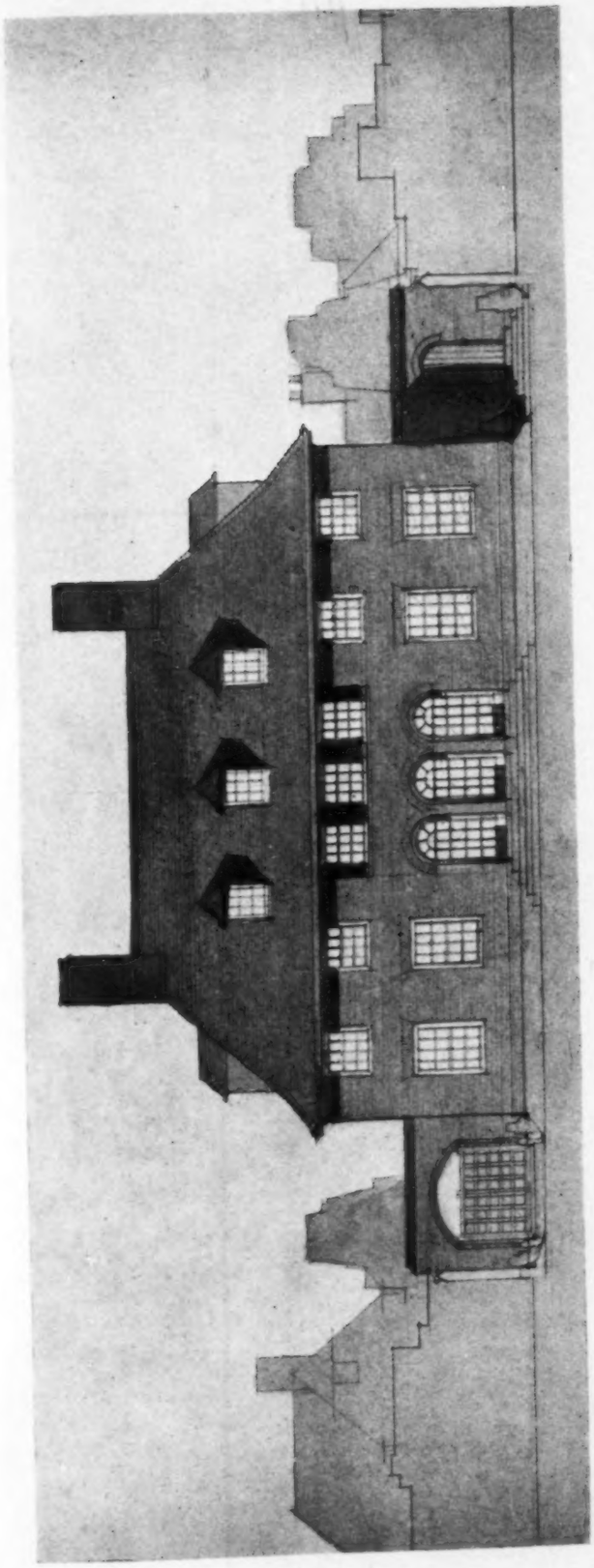

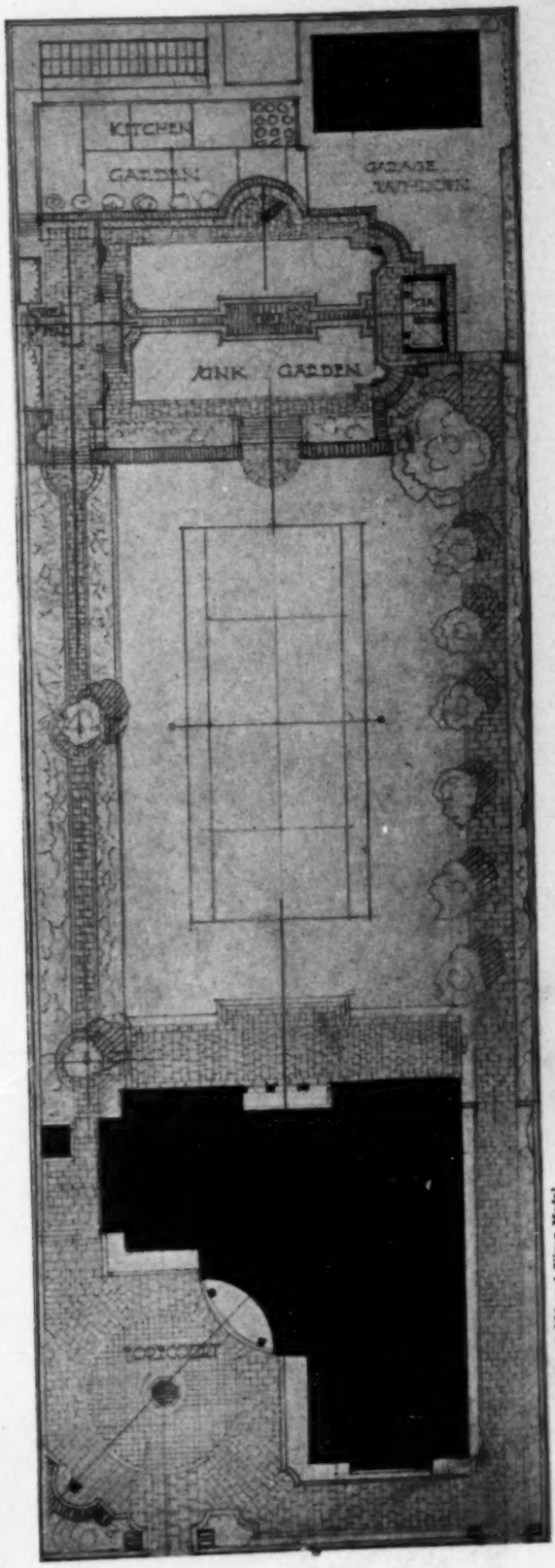

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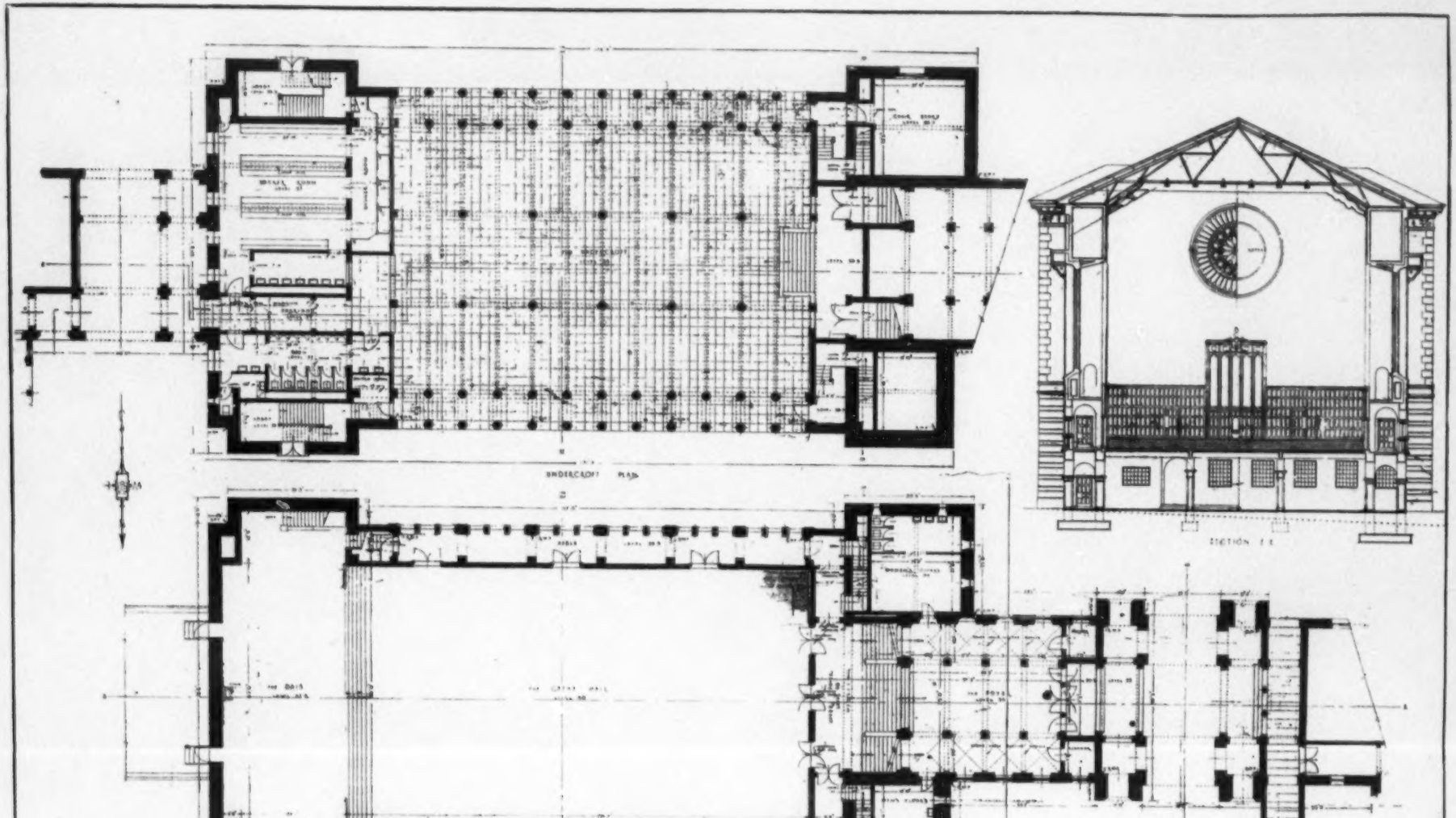
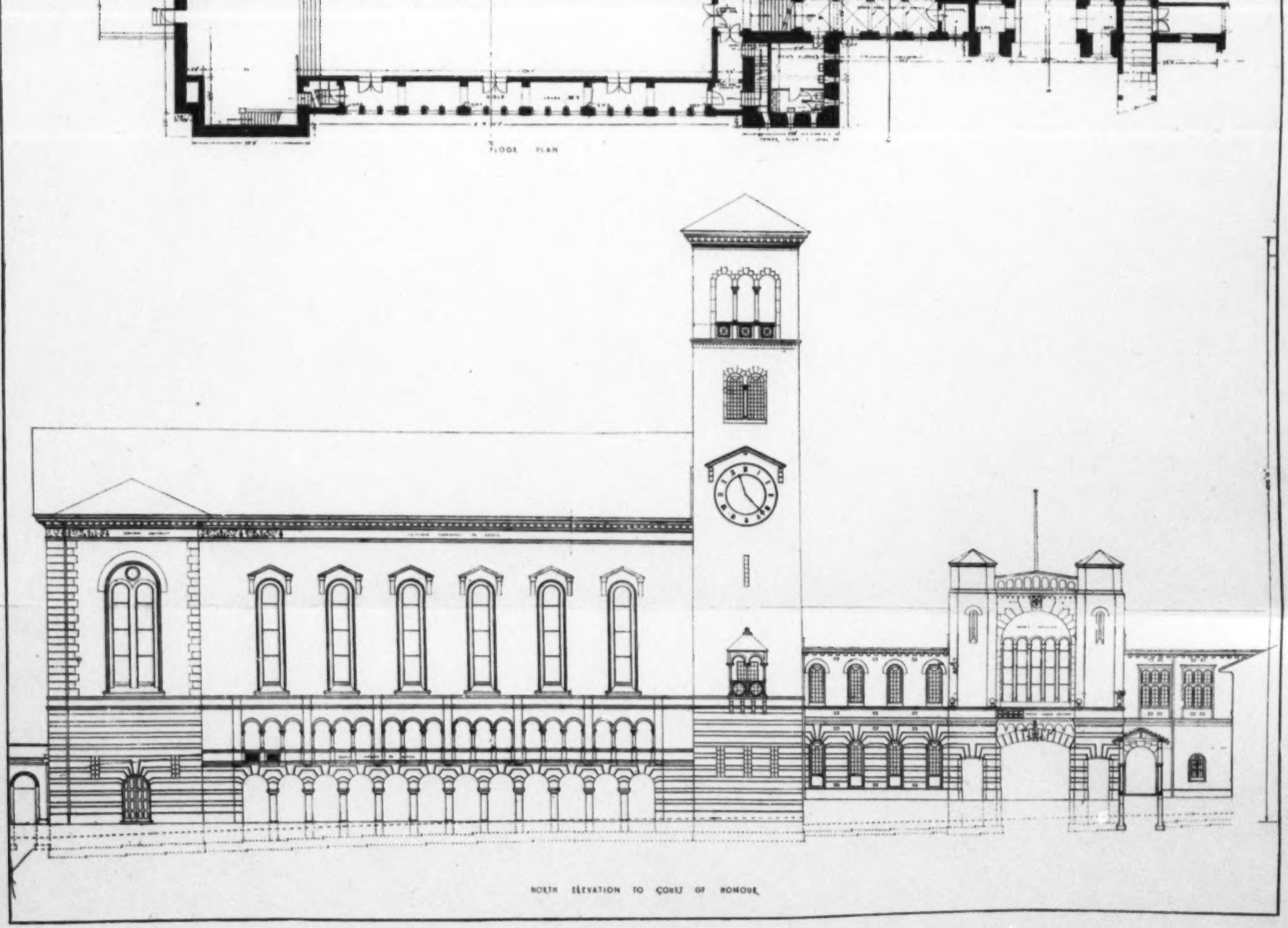
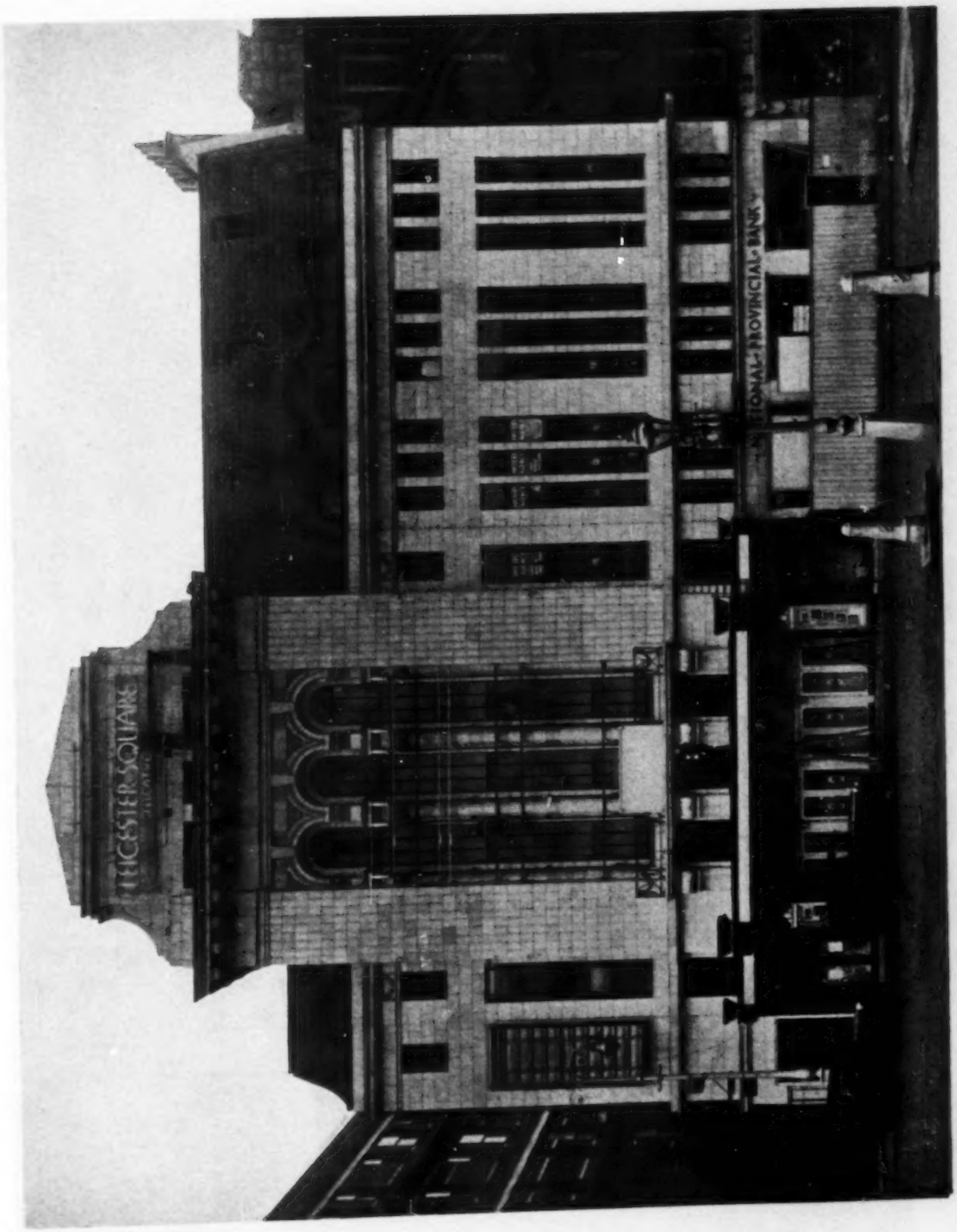




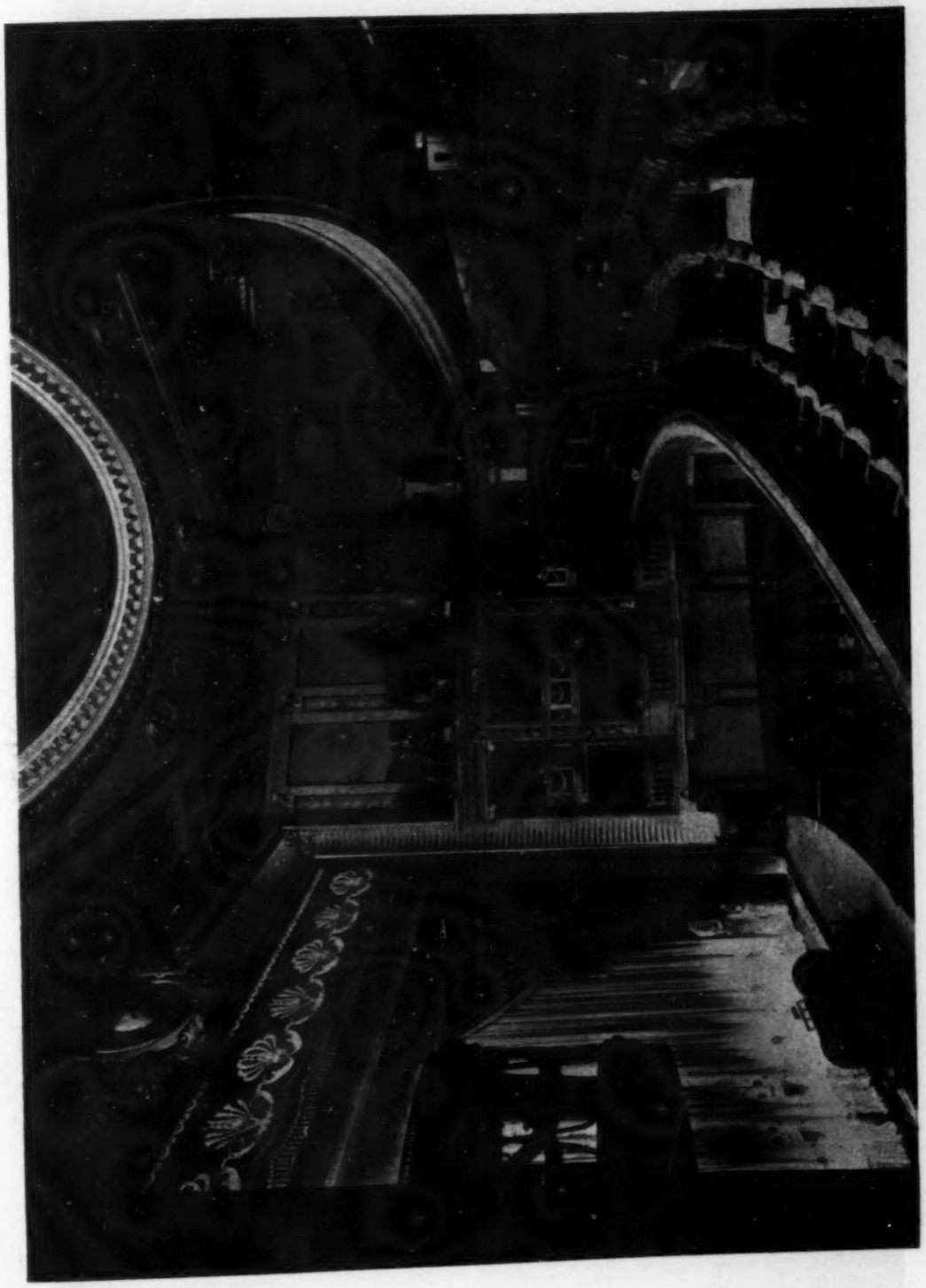
University of Western Australia, Crawley, Perth: Winthrop Hall.

MESSRS. RODNEY H. ALSOP, F.R.I.B.A., AND CONRAD H. SAYCE, Architects.



The Leicester Square Theatre, W.C.: General View of Exterior.

Mr. Andrew Mather, L.R.I.B.A., Architect.



The Leicester Square Theatre, W.C.: General View of Interior, from Circle.

Mr. Andrew Mather, L.R.I.B.A., Architect.

LOUNGE.

ENTRANCE HALL.

The Leicester Square Theatre, W.C.

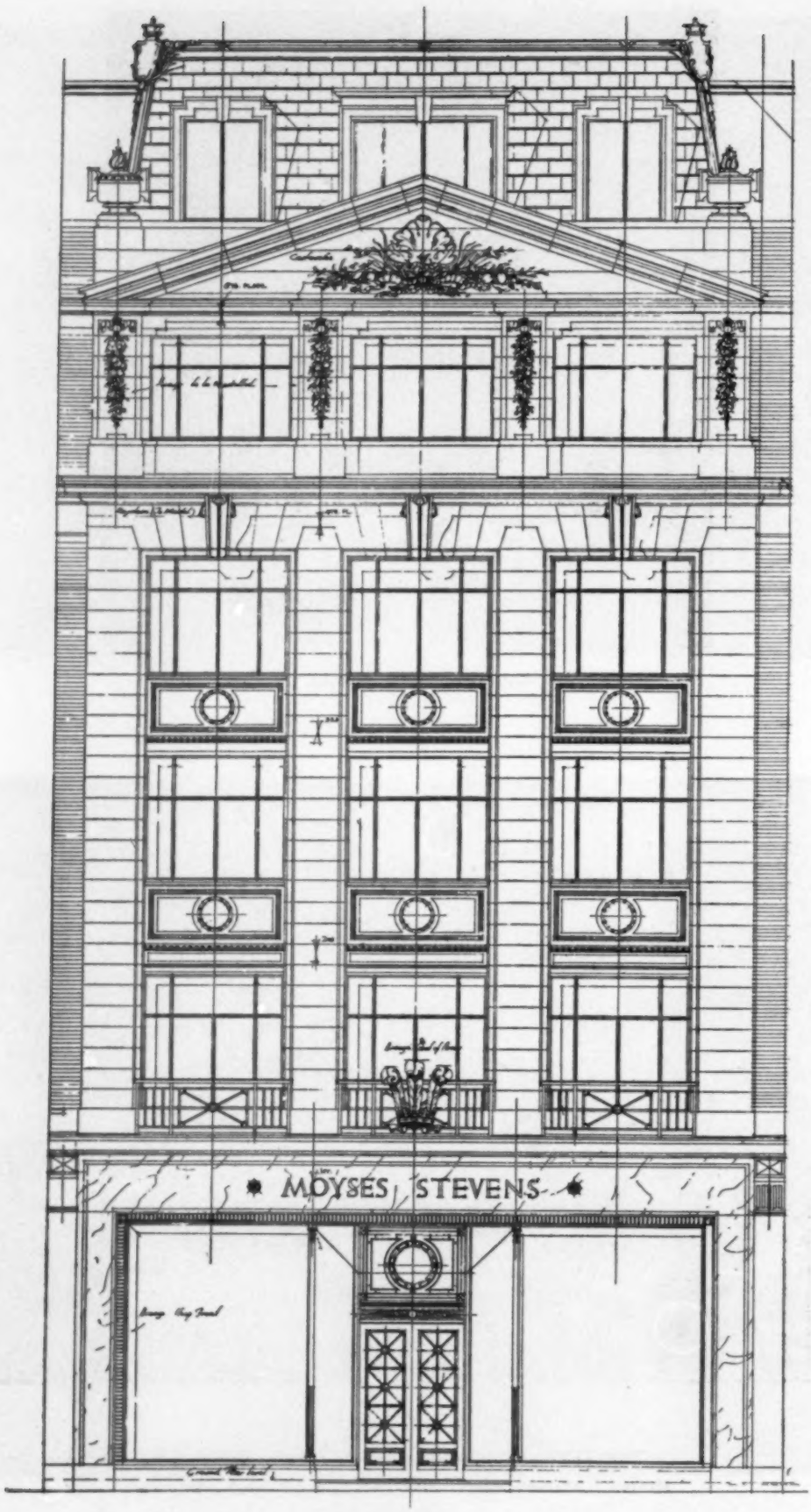
MR. ANDREW MATHER, L.R.I.B.A., Architect.

VIEW SHOWING LAY-LIGHT.

GENERAL VIEW.

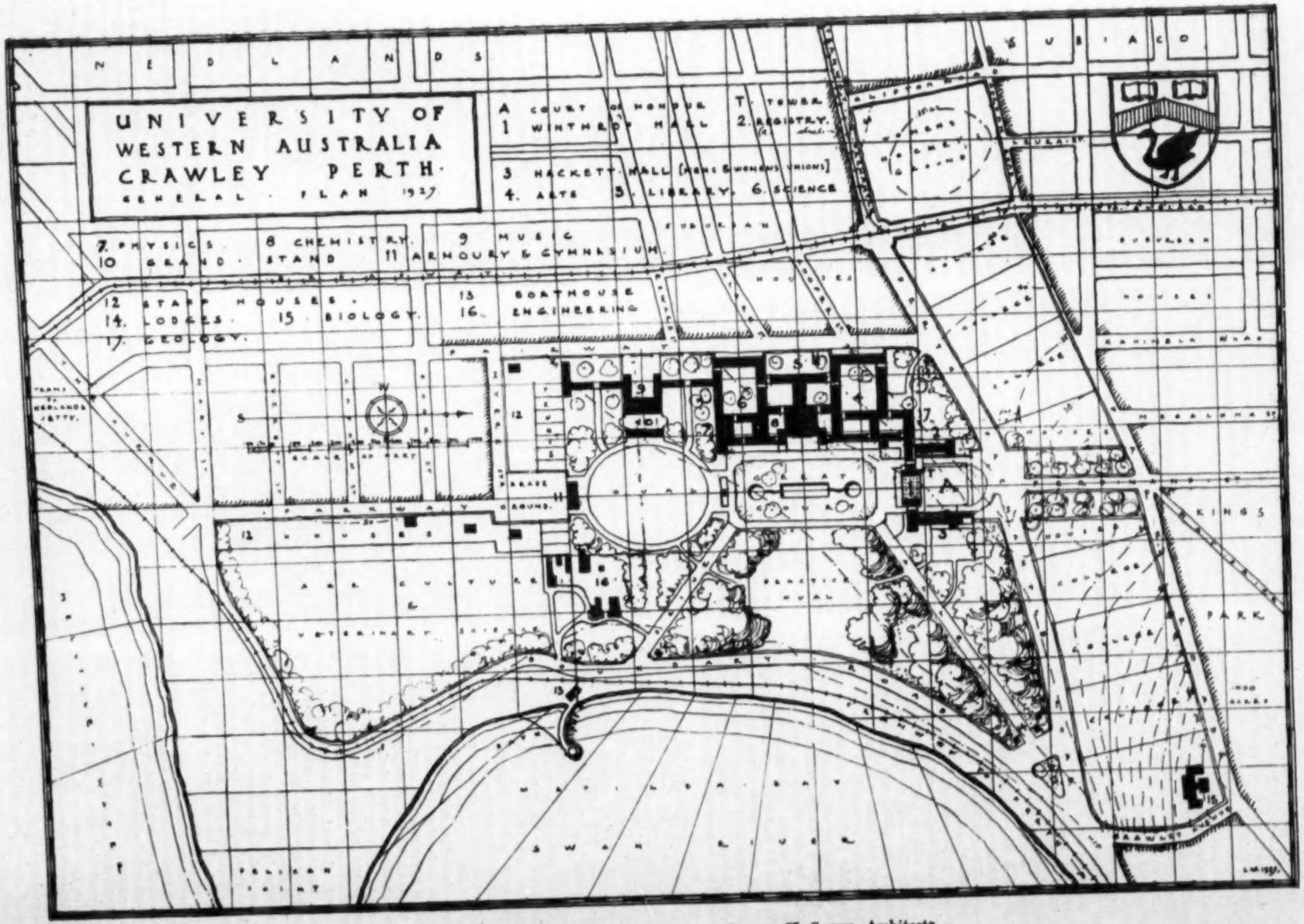
New Floral Showroom, 144-150, Victoria Street, S.W.

MESSRS. J. STANLEY BEARD AND CLARE, F. & A.R.I.B.A., Architects.



New Floral Showroom and Business Premises, 144-150, Victoria Street, S.W.: Front Elevation.

Messrs. J. Stanley Beard and Clare, F. & A.R.I.B.A., Architects.



MESSRS. RODNEY H. ALSOP, F.R.I.B.A., AND CONRAD H. SAYCE, Architects.

THE AESTHETIC SIDE OF STRUCTURAL AND CONSTRUCTIONAL ENGINEERING

A PAPER on this subject was read by Mr. Howard Robertson, F.R.I.B.A., S.A.D.G., at a meeting of the Institution of Structural Engineers, held on Thursday, December 11. The lecturer said it was perhaps inevitable that the architect and the engineer should regard structure from a slightly different angle. The architect was first and foremost an artist, or should be; although few architects would willingly admit it, for fear of the inferences which critics might draw. For, in spite of much evidence to the contrary, the artist was always supposed to be completely inept in practical and business matters. The engineer was primarily a scientist. There was a fundamental difference in the approach to building problems of the artist and the scientist.

The artist had what was called inspiration. He was faced with a concrete task, or provided himself with an imaginary one. He steeped himself in the problem. And then—and here was the important point—he eventually had a vision, inchoate, perhaps, of a conception. Ill-defined, vague, it nevertheless existed. Its contours were not sharp; its substance was elusive; but nevertheless the idea was there; the vision was persistent, if remote.

From this vision of form, the artist passed by gradual processes towards realisation. What in the beginning was abstract gradually became concrete. Concentration of the mind, and a perpetual concern with the problem in hand, slowly brought definition. The veils were lifted one by one; the misty conception became with each process more defined. Impressionism hardened into precision. And out of an abstraction had come reality.

With the scientist the process was reversed. The scientist loved facts and data. He started, therefore, with definitely formulated elements of fact. But he used them not as a collector for the mere joy of their display, but to create visions. The scientist, with his basis of exact knowledge, reached out into the realm of the imponderable. He was looking for phenomena above and beyond his data, his mind was haunted by possibilities which were visions. He was like an airman who, in a machine of proved capacity, was ready to fly into the unknown.

Architect and engineer were complementary. The former offered to the latter some satisfaction of the abstractions which the scientist craved. The latter helped the former to the realisation in concrete form of his imaginings. So, in the practice of architecture, design and structure represented by the architect and the engineer, went, and always had gone, hand in hand.

The first element of architectural design was the conception arising from the programme answering the purpose and function of the building. The second was the structure by means of which the answer to the programme was realised. The third element was that of æsthetic pleasure, by means of which building, played upon by the forces of humanism, was raised to the status of architecture.

All these three were mutually sustaining. In structure alone was not to be found the soul of architecture, even though it be completely satisfactory from every scientific aspect. The corollary: a thing which functioned perfectly was not of necessity beautiful, for example, a petrol pump and a gasometer. In good structure, however, resided potentialities for æsthetic satisfaction. Rhythm, harmony, proportion, were elements of eye pleasure. And a system of order lay behind the abstraction of these qualities.

But for structure to be transmuted into architecture, it must be galvanised by imagination into life. The complete satisfaction of material requirements would not, by itself, achieve architecture. Outwardly, and for the purpose of definition, architectural development might be classified according to structural changes.

The most fundamental change had taken place in structure. The introduction of exact engineering science, as applied to structure, substituted empiricism and rule-of-thumb which, for centuries, had fettered architectural design. Never before had exact calculations, mathematical certainties as regards structure, been available. Engineering science gave to architecture a freedom which it had never known.

The possibilities of structure in the past had been a constant source of inspiration. But to-day they were more than that. They were an urge, a compelling force. For the first time in history they not only met a demand, they began to create it. Knowing that we could bridge vast spaces and build towards the sky, there was felt the itch to do so. Each new progress in structure created the urge to use it.

Structure, therefore, stood to-day in a position of pre-eminence. So compelling was its interest that the demand to acknowledge it, as an element of significance, was becoming general. But the reasons for doing so must not be confused with those which had often in the past been advanced. They were æsthetic and practical reasons, not ethical reasons.

We found two categories of problem in the matter of treating structure. In solving the first, we based our solution on the assumption that the structure was not a major element of interest. In the second, we regarded structure as almost completely responsible for the form which the building took. Even in the latter case, it did not follow that structural elements need be exposed. They might be enclosed, hidden by decoration, but such decoration would make mute acknowledgment of the structural form beneath.

In the first category we placed the commonplace structural framework of such buildings as medium-sized houses, flats, office buildings, sheds, garages, and so forth. An ordinary steel roof truss, an occasional stanchion, gave one no thrill. They were interesting, but not more so than the wires of a piano. He did not want to have these vertebræ thrust forcibly under his nose. They were functional necessities, which, though perfectly designed for use, had a very minor intellectual or emotional interest.

When, however, the small office of four or five stories became a thousand-foot skyscraper, his mental attitude altered. The physical daring involved in the erection of such a building captured the imagination. Structure so light and delicate, yet so strong and aspiring, was, he felt, worth exhibiting; let him have, as he passed by, the sensations of this wonderful engineering organism.

This demand was the more urgent since, in the course of building, he had seen the steel structure grow. Its fragile network of members, its ordered complexity which had enough of mystery to be poetic, had a beauty which was so often lost in the finished building.

Obviously the steelwork could not be exposed. The architect, therefore, attempted to clothe it in the materials at his command, and to give to its form some suggestion of the structural vitality within. Sometimes he was successful, as in the Woolworth building, the Gothic trimmings of which were as appropriate as any other trimmings. At other times he suggested his structure by line, as in the Pan-Hellenic Tower, or by choosing forms which were only realisable in steel or concrete, as in the Telegraf offices at Stuttgart. At other times he neglected expression of structure quite frankly and concentrated on the beehive character of the big office building, as in the Buhl building and dozens of other large office buildings in New York and Chicago.

Many attempts had been made to leave structure exposed, and make of it a decorative element. And the least successful were those which departed most radically from the character of steel or concrete. Where steel or concrete were shown without embellishment success rested on a surer basis. But here the æsthetic treatment made greater demands, for the designer came face to face with a problem which must be solved without subterfuge. And this was the problem of evolving structure which was not only materially perfect, but which also achieved the nearest possible approach to beauty of form. Fortunately for the engineer, forms which were satisfactory from a scientific standpoint were frequently satisfactory to the eye.

The modern movement had encouraged the recognition of structure because of its reaction against superfluities in general. Where economy was a necessity, only fundamental elements remained. And where architectural interest was desired the form of structure inevitably received attention. The tendency was towards frank acknowledgment, and the consideration of structure from the dual aspect of strength and æsthetic quality. An instance was the Transbordeur Bridge at Marseilles, strong, yet airy and delicate.

Concrete could also be handled with imagination and without disguise. And here tribute must be paid to the brothers Perret, of Paris, architects, engineers and builders. Their optical workroom, the garage in the rue Ponthieu, and their churches at Le Raincy and Montmagny showed how closely structural and decorative form could be intermarried. In all these buildings economy in cost had governed.

Even in domestic architecture the new freedom was occasionally effecting a profound metamorphosis in accepted types. The French architects Le Corbusier and Jeanneret, for instance, had advanced the ideal of facades, and plans liberated from the restrictions of solid weight-bearing walls usually assumed as necessary for structural support.

Structure here was frankly accepted, and columns were not considered an objection. They ran up through the rooms, as did the flues, and served also to house the down pipes from the roof. For these architects drained their flat roofs from the centre, arguing with justice that in freezing weather it was in the centre of the roof that thawing set in, and in consequence that was the logical site for a sump.

The architectural effect of this house was revolutionary. Yet it was the direct outcome of the structural system employed. There was a growing recognition to-day of the fact that structural developments could assist the architect towards the realisation of ideals which were, it was true, only of recent birth.

To-day, the flexibility of modern structure was influencing design. The possibilities of mushroom construction, of the cantilever, were bringing out an expression which was not only real, but one which also percolated into the realm of furniture and the smaller details of decoration.

New Steel Bridge, Firth of Forth.

The Parliamentary plans for the new bridge at Kincardine have now been deposited. This bridge will cross the Forth, and is a steel bridge having fourteen approach spans with an opening swing bridge giving two clear openings of 100 ft. each, and was designed by Sir Alexander Gibb & Partners. The total length of the bridge is 2,400 ft. Two projects have been under consideration: one a bridge at Alloa and the other at Kincardine, and the engineers to both schemes agreed that, on the balance of financial and traffic considerations, the Kincardine site was to be recommended. The total cost is in the neighbourhood of £300,000, and the building of the bridge in connection with the official programme for unemployment relief will be of some help to the steel industry.

THE TOWN PLANNING INSTITUTE

Mr. F. W. Platt presided over a largely attended meeting of the Institute at Caxton Hall, Westminster, on December 12, when Mr. G. L. Pepler read a paper on "Twenty-One Years of Town Planning in England and Wales."

Mr. Pepler in the course of his address said the first Town Planning Act was passed in 1909, tacked on to housing in the Housing and Town Planning Act. They had therefore reached their majority, and it seemed opportune to take stock of the situation and consider what use they had made of their minority and how they might mend their ways to be of greater service to the community. Looking back over the years, they first thought of the pioneers to whose efforts they owed the original Act, and they recalled Sir Ebenezer Howard, Mr. H. Horsfall, Sir Wm. Lever, Mr. G. Cadbury, John Nettlefold, Alderman Thompson, H. R. Aldridge, Harold Shawcross, E. G. Culpin, Raymond Unwin, Inigo Triggs, Professor Geddes, Thomas Adams, and the Rt. Hon. John Burns. His own impression was that the majority of the early stalwarts approached the problem principally from the housing point of view, and it was therefore not inappropriate (although, perhaps, not in some respects fortunate), that Town Planning was first tacked on to a Housing Bill. It certainly led to confusion of thought and obscured the fact that housing was but one, although a very important one, of many planning problems. At that time motoring was in its infancy and aviation hardly more than a dream, and no one realised the new forces that would have to be coped with, or the changes in forms of development that they would necessitate. Perhaps these pioneers realised that their countrymen were temperamentally averse to planning, but surely must at least see the futility of building good houses if no care was taken of their surroundings; therefore housing was a good strategic line of approach.

In October, 1910, the Royal Institute of British Architects organised an important Town Planning Conference and Exhibition, and, soon after, Thomas Adams began the formal discussions which led to the formation of the Town Planning Institute, the inaugural banquet being held in 1914, when Sir Aston Webb presided, and Mr. John Burns, President of the Local Government Board, gave the inaugural address.

So soon as the Act was passed, the officers of the Local Government Board had to get busy preparing regulations (issued May 3, 1910). The first scheme approved was the City of Birmingham (Quinton, Harborne, and Edgbaston) Town Planning Scheme (2,320 acres), May 31, 1913. The East Birmingham Scheme (1,442 acres) was approved on August 18, 1913, and the Ruislip-Northwood Scheme (5,906 acres) on September 7, 1914. In November, 1913, Mr. John Burns summoned 115 local authorities in Greater London to a conference which resulted in the preparation of a great scheme of arterial roads, the greater part of which had already been constructed as unemployment relief works. Up to the end of March, 1914, authority had been given by the Local Government Board for the preparation or adoption of 56 schemes by 42 local authorities, embracing a total area of more than 90,000 acres, and, of these, five schemes had been submitted for approval. The War naturally checked progress, but a good deal had been done between March and August, 1914, and the annual report of the Local Government Board (1914-15) records that at March 31, 1915, 74 local authorities had received permission to prepare 105 schemes, covering 167,571 acres.

At the end of July, 1919, was passed the Housing, Town Planning, etc., Act, 1919, which contained some important amendments relating to town planning. Revised regulations, necessitated by the passing of the Act of 1919, were issued by the Minister of Health during 1920, and came into force on May 2, 1921. They provided for the first time a time schedule and for the preparation of preliminary statements. The Housing (Additional Powers) Act, 1919, passed in December of that year, included a clause (10) intended to facilitate the acquisition of land for the purpose of garden cities or town planning schemes by local authorities (including county councils), jointly or severally, or by approved authorised associations not trading for profit. The Housing Act, 1921, authorised the Public Works Loan Commissioners to advance loans to any such authorised association for the purpose of developing a garden city, in accordance with a scheme approved by the Minister of Health. In January, 1920, the speaker had the honour of presiding at Doncaster at the first conference of local authorities summoned by the Minister of Health, with the object of forming a Joint Town Planning Committee. The first meeting of the Joint Committee was held in the following May. In the same year the Minister of Health appointed the South Wales Regional Survey Committee, which later published a voluminous report covering all aspects of land development connected with the South Wales coalfield. In February, 1923, the first set of model clauses for use in the preparation of schemes was issued by the Minister of Health.

The Housing, etc., Act, 1923, contained certain provisions relating to town planning. It extended the machinery of the Acquisition of Land (Assessment of Compensation) Act, 1919, to the settlement of claims for compensation and betterment. The Act enabled the Minister to authorise the preparation of a town planning scheme for land, whether developed or not, with the object of preserving the existing character and features of a locality with special architectural, historic, or artistic interests; a power which had already been taken advantage of by such cities as Oxford, Winchester, Canterbury, Exeter, Stratford-on-Avon.

The year 1925 was notable for the passing of a Town Planning Act, 1925, which consolidated the previous Acts and amending Acts and for the first time gave them a Town Planning Act not an addendum to housing. 1926 was notable for the Newcastle-upon-Tyne Corporation Act, which, inter alia, provided for the extension of town planning powers to cover the developed parts of the city, and also provided for the registration of ownerships, thus saving the Council the great expense of referencing. The example of Newcastle had since been copied, in some cases with certain variations, by local Acts for Birkenhead, Birmingham, Blackpool, Bournemouth, Chester, Derby, Epsom Rural District, Guildford Rural District, Rotherham, Southport. In the same year the Birmingham Corporation organised a notable competition for laying out a Civic Centre in the heart of the city. At the end of the year the Minister of Health called a conference of all the local authorities and joint committees with the London Traffic Area, with a view to establishing a Regional Committee for the area as a whole. The conference endorsed the suggestion and the committee was subsequently formed. The speaker proceeded to refer to various important events in 1927, including the passing of the Hull, North-East Hull and Sutton Town Planning Scheme and the appointment of the Royal Commission on London Squares; the passing of the Derby and District Town Planning Scheme in 1929, and the Epsom Rural District Council Act in 1930. In all 928 schemes, covering some 5,888,300 acres, had been embarked upon by 581 local authorities up to the end of November, 1930, of whom 208 were under an obligation to prepare schemes and 373 had acted entirely voluntarily. Continuing, the speaker said he had asked many of his friends amongst the town clerks and municipal engineers in the country for information as to definite results in the districts in their charge, and this had been summarised in the paper. The reports indicated that although a lot of the building that was going on might fall far short of their ideals and while they might deplore certain urban encroachments on the countryside, there was nevertheless plenty of ground to encourage them to renew their efforts. If they remembered the kind of development that was proceeding 21 years ago, when, for example, it was almost the universal practice for an estate developer, as his first act, to cut down all growing timber; when each estate was developed in isolation with a reserved strip at the end of each road, at the boundary (if any reached the boundary) for the next man to buy if inter-communication was sufficiently desired, they could fairly say that to-day there was a marked improvement. In England they had no love for dictators, and on the whole preferred rule of thumb to planning. So that it appeared to him that the local authorities had been wise in using persuasive methods. It was, for example, gratifying to hear from several quarters the response that had been forthcoming when the authority had published a leaflet explaining the aims and objects of the scheme that they were preparing, indicating the elementary principles of good design and the materials appropriate to the locality. In their good old English way they preferred to reverse the order of logic and to work up to the general from the particular. They began with the idea of planning the extension of towns (incidentally neglecting their cores), next they saw that even this required regional planning, and now they realised that any sound system of planning must give equal weight to and provide a proper balance between the national, urban, and rural points of view.

Mr. H. E. Stilgoe (Metropolitan Water Board), in proposing a vote of thanks to the author, said that Mr. Pepler had shown generous self-effacement, for one would have thought from the paper that he had nothing to do with the work. They knew, however, that Mr. Pepler had been behind every movement, and neither the country nor the Institute could be more grateful to anyone than him. With regard to town planning, he had always urged that from the start they should get their widths of streets earmarked, although they need not start at once to pave them with gold. An important thing in the lay-out of a great arterial road was to bear in mind the future and what might be the requirements of traffic, not only on the surface but in the subsurface; so that if there was a necessity to construct subsurface tramways, either in open cut or cut and cover, they would have space in the road without having to construct tubes at great depth. They should see also that the centre space was not hampered with sewers and other services which might afterwards have to be removed. The Great War and the subsequent tremendous increase in the cost of building had been a great drag on town planning, but it might be some indication of the advancement made if he stated that in London alone, where town planning was going on, they were laying 1,000 water pipes, each four yards in length, per week.

Professor S. D. Adshead, in seconding the motion, expressed his feeling that Mr. Pepler was undoubtedly the leading figure in town planning. The Institute had grown by leaps and bounds, and was now recognised universally as one of the most important professional institutions of the country. They had heard a very clear recital of what had been done, but he did not think sufficient reference had been made to the introduction and gradual infusion into town planning of regional planning. Regional planning was now established as essential and as coming prior to town planning, and he hoped in the new Act some statutory power would be given respecting it. He hoped powers would be given to amend areas which had been town planned or were

in various stages of town planning, because there were many areas where, had regional planning been preparatory to town planning, they would have had something different to what was likely to be the final result without it. With regard to national planning, they knew the Ministry of Transport had enormous powers with regard to roads, and he wished it had more power so as to deal with amenities and fringes. In the early days of town planning a good deal of propaganda was done in the way of exhibitions, and he thought the time was arriving when there should be something in the way of a big spectacular exhibition which would excite the layman. He could not help feeling that as town planning was advancing in its administrative methods it was inclined to become a little too standardised. The original idea was that every local authority should in town planning have the opportunity of dealing with its own local peculiarities and interests in its own way; but now there was just a tendency of standardised streets and standardised methods for dealing with buildings being universally adopted throughout the country. He issued this as a word of warning that they were getting away from that fine original outlook which really brought town planning to the fore as a remedy for breaking up the standardised streets under the Act of 1875.

Col. Bressey (Chief Engineer, Roads Board) expressed the opinion that the most hopeful thing to-day was that the County Councils were going to interest themselves more largely in town planning than in the past; it was most striking to notice the difference of the attitude of local authorities in regard to amenities during the last few years; it was true the Ministry had large powers in regard to roads, and unfortunately roads had outgrown town planning; they were pressed forward to relieve unemployment; and when finished it was often found that town planning had not been at work, and little protection was offered for the frontages of these new roads. He demurred to the suggestion that the entire protection of the roads should be placed on the road authority. Those who administered the Road Fund had to watch it carefully, and although Mr. Raymond Unwin had urged that the Road Fund should defend the landscape as far as it could see it, he had heard the suggestion that mortuaries should also be provided by the Fund.

Mr. E. G. Culpin referred to his early pioneer work in connection with town planning, and pointed out the difference in the attitude of the landowner to the movement at the present time. In the last week he had had eight landowners with average holdings of 1,500 acres each who had expressed their desire to have their estates scheduled as open spaces.

Mr. F. Marsden (Bradford) thought that the Public Works Facilities Act ought to be mentioned. It was a wonderful step forward, for it really meant that a local authority could get all the powers of a Provisional Order at any time during the year.

Sir Richard Paget recalled the fact that he had to do with the author of the paper at a very early stage of his association with town planning, for Mr. Pepler was concerned with the lay-out of land at Wolverhampton owned by his father.

Mr. S. A. Kelly said that with regard to arterial roads they were all anxious to have safety view-points where motorists could slow down and enjoy the view.

Mr. Pepler, in reply, said it had been largely a labour of love for him to be engaged in town planning work and to have the opportunity of meeting officials and members of local authorities up and down the country. It was the energy of Col. Bressey which had translated their plans into actuality as regarded roads, and whilst it was true that he had been forced to go ahead of town planning, that should be an incentive to them to get on with their schemes, so that they could always go hand in hand.

CHARTERED QUANTITY SURVEYORS.

ANNUAL DINNER.

On Wednesday, December 10, the annual dinner of the quantity surveyor members of the Chartered Surveyors' Institution was held at the Connaught Rooms, Great Queen-street, W.C. Mr. J. B. E. Drower, C.B.E., presided.

Viscount Burnham, proposing "Architecture and the Building Industry," said the quantity surveyor was not merely a technical accountant, but a man with unlimited knowledge and superhuman virtue, who shielded the householder from the builder and the builder from the temptations that beset him. He (the speaker) had been out of a job for some time, and he felt that if he went back into trade it would be the building trade, and of all things connected with building he would prefer to be a chartered quantity surveyor. The building trade was above all changes and chances of fortune, and even in these days, when things were in the worst state of depression, it maintained its prosperity—at any rate, its rate of unemployment in the London area was less than in any other industry. Architecture and the building trade stood together; there was no such thing as good architecture without good building or good building without good architecture. Tastes differed as to what constituted a great building; a recent German critic had said that the most complete and satisfying building in England was the Crystal Palace. Another German critic had said that it was no good rummaging in the mummified remains of the past; we ought to strike out a new line for ourselves. At the present time the London area was to a large extent undergoing reconstruction, and a great deal of building was going on of which we had often reason to be proud. It might displease old fogies, but it displayed originality. Modern buildings had attracted the admiration of the world; he did not know a finer one than the new cathedral at Liverpool. We admired the spirit which led people to build mainly with an eye to the purpose the building was to serve. In the union of the trades which were combined in the toast we had the happiest promise of the future. In this combination we had to consider the operatives, because unless these gave their willing service all that was done by the architect and building contractor was destined to fail. The prospect in front of the building trade was as good as it had ever been. Might it long continue to prosper.

Dr. Raymond Unwin, responding, said it was interesting to think of the difference between the function of the architect and that of the quantity surveyor. The quantity surveyor always had to make two and two result in four; if he yielded to the temptation to make them result in five or three-and-a-half he was "down and out." But the architect who put two and two together and only got four out of it was a thoroughly bad architect; for it was the function of design to put things into such a relation that one created an additional value arising out of that relation. Two and two made four of the material, but there was something the architect had contributed. This might be a value of use or convenience or the more subtle value of beauty. The difference of function as between architect, quantity surveyor and operative was something that had to be recognised. It was not a question of one being more valuable than another; all were essential. Building more than any other industry represented the experience, history and tradition of the country where it was practised. We wanted the contribution of the quantity surveyor, and in ways in which we had not had it in the past. We had not had as much of the quantity surveyor's help in the matter of housing schemes as we might well have had; something might be done by quantity surveyors in adapting their forms of quantities to this class of work, which produced a multitude of repetitions of one comparatively small unit. To-day we were facing new principles of design, and we must seek to preserve what was valuable in tradition while keeping our eyes open for what was fresh and new. There was no clash between originality and tradition; it was a question of understanding the relation between the two. Architecture depended for public appreciation on having a tradition which was understood throughout the country—not understood only by the man who laid the bricks, or the owner of the building, but understood by the public. If we were always chopping and changing we could not have that popular understanding, but at the same time we did not want the monotony of a bad tradition; we wanted a living tradition embodying from time to time whatever was new and advantageous.

Mr. R. A. Costain, also responding, said he spoke for a good many when he said that he must have lost his way if the present prosperity of the building trade was such as Lord Burnham had suggested. There were four indispensable elements to the building trade—architect, quantity surveyor, building contractor and operative. These were four links in a chain of service. The chain was engaged in moving the wheel of our industrial machinery effectually and smoothly so as to give the public the utmost value for their money. All must bear in mind that each was out for an understanding of the position of the others, so that jointly they might render the utmost service to the community.

Mr. Thomas Barron also replied, and said he would like to say how pleased the operatives were that they were being recognised as an integral part of the building industry. They had heard how the architect could make two and two into five, but sometimes even architects made mistakes in their designs. Quantity surveyors and builders often made mistakes—according to their own account the mistake builders most often made was that of offering too little for the job. The operative was expected to rectify the mistakes of all the others. The building industry was seeing a beginning of a state of things where by mutual understanding and co-operation all necessary functions of the industry were brought into touch so that somebody was able to speak for the industry as a whole.

Mr. J. M. Theobald proposed "The Guests," and Sir Richard Allison, C.B.E., responded.

Sir John Tudor Walters, M.P., who proposed "The Chartered Quantity Surveyor," said that during the last ten years he had given out contracts for over £20,000,000 for the housing of the working classes, and in connection with those contracts he had found the most splendid support and assistance from the building trade generally, and although there had been several strikes during that period no workman had ever been taken from any of those housing schemes. In connection with the great house-building campaign, where there was necessarily so much repetition and ought to be standardisation, he believed that if quantity surveyors were called into consultation, ways and means might be devised whereby, without monotony, without anything that would prevent the architect from manifesting taste, or anything that would deprive the contractor of his legitimate vocation, we might arrive at a better basis of prices.

The Chairman, responding to the toast, said men even of middle age could hardly appreciate the profound change that had come over us since mid-Victorian days. In nothing was that change more marked than in the relationship of employer and employed, and the readiness to acknowledge the mutuality of the arrangements between contracting parties. In the relations of architect, building owner and contractor this spirit was active, although not always reflected in the contract documents, and contracts were interpreted more equitably than formerly. One result was that the quantity surveyor's position was becoming more and more arbitral, and of increasing importance as holding the balance true between two interests.

SOCIETIES AND INSTITUTIONS

R.I.B.A.

The Royal Gold Medal for Architecture.

Intimation has just been received that His Majesty the King has approved the award of the Royal Gold Medal to Sir Edwin Cooper, A.R.A., F.R.I.B.A., in recognition of the merit of his executed work. The medal will be presented to Sir Edwin Cooper on Monday, March 2, 1931.

Following are notes from the minutes of the Council for November 3 :—

Obituary.—The Secretary reported with regret the death of Mr. E. R. Kennedy, Past-President of the Ulster Society of Architects, and a former member of the Council, and on the proposition of the President it was resolved that an expression of the deep sympathy of the Council be conveyed to the relatives of the deceased.

International Exhibition of Persian Art.—On the recommendation of the Literature Standing Committee it was agreed to invite Mr. A. U. Pope, a director of the exhibition, to read a paper on Persian Art at a special general meeting to be held on Thursday, January 15.

Proposed Palace of Justice, Athens.—The following resolution was passed by the Council :—"The Council of the Royal Institute of British Architects share the apprehension of the Académie des Beaux-Arts at the proposal of the Greek Government to erect a Palace of Justice near the Acropolis and close to the Theatre of Dionysos. They join with the Académie des Beaux-Arts in hoping that the Greek Government will consider the danger of interference with these great monuments by placing a modern building in juxtaposition with them."

Ralph Knott Memorial Fund.—On the recommendation of the Board of Architectural Education it was agreed to accept the proposal of the Architectural Association that the R.I.B.A. Maintenance Scholarships Committee should undertake the nomination of a recipient of the Ralph Knott Memorial Scholarship each year.

Examination for the R.I.B.A. Diploma in Town Planning.—The Board of Architectural Education reported that Mr. J. M. Fraser had passed the Examination for the R.I.B.A. Diploma in Town Planning, and on their recommendation it was resolved to award the diploma to him.

The Architects' Benevolent Society.—At the invitation of the Council of the Architects' Benevolent Society it was agreed that the R.I.B.A. should be nominated as a Trustee of the Society.

The Library Association.—On the recommendation of the Literature Standing Committee it was agreed that the R.I.B.A. should join the Library Association as a corporation.

The Fellowship.—The Council, by a unanimous vote, elected Lt.-Col. P. A. Hopkins, Licentiate, to the Fellowship under the powers defined in the Supplemental Charter of 1925.

Election of Students.—The following Probationers were elected as Students of the R.I.B.A. :—

T. E. T. Denison (Leeds Coll. of Art).
R. L. de Wet (Univ. of London).
J. W. Farrow (A.A.).
R. H. Franks (Northern Poly.).
R. J. L. Jackson (Liverpool Sch. of Arch.).
F. F. Johnson (Leeds Coll. of Art).
P. Lingwood (Leeds Coll. of Art).
Mary E. Lloyd (Birmingham Sch. of Arch.).
Zoë T. Maw (A.A.).
Mary I. Mayo (Liverpool Sch. of Arch.).
D. F. H. Naudé (Liverpool Sch. of Arch.).
V. W. Rogers (Liverpool Sch. of Arch.).
J. K. G. Sarjeant (Univ. of London).
E. Seel (Leeds Coll. of Art).
C. C. Spence (Armstrong Coll., Newcastle-on-Tyne).
Constance S. Stammers (Liverpool Sch. of Architecture).
A. G. Wise (Univ. of London).

FACULTY OF ARCHITECTS AND SURVEYORS.

The fourth annual dinner of the Faculty of Architects and Surveyors was held on Friday, December 12, at the Hotel Metropole, W.C.2, when Mr. E. F. Harmer, F.S.I., presided. Amongst those present were Sir Clement and Lady Kinloch-Cooke, Mr. and Mrs. W. G. Percy (Past President), Mr. R. Harry Stanger, Major W. P. Reynolds, Messrs. E. H. Goddard, B. Hamburger, L. Jenkins, E. J. Michant, H. Langford Moyle, and the Secretary, Mr. H. B. Whitfield.

After the customary loyal toast,

Sir Clement Kinloch-Cooke proposed the toast of "The Faculty of Architects and Surveyors," in which he said he had been actively connected with the efforts that had been made to place a Registration Bill for architects upon the Statute Book. The membership of the Faculty, he understood, was approaching one thousand, and he congratulated them upon its rapid and continuous success. It was a proof, not only of its popularity and organisation, but also of its usefulness as a centre for architects and surveyors. The profession had very important duties to fulfil, not only to themselves and their clients, but to the community at large. Those duties had become more onerous. The introduction of new materials and new methods in building had added greatly to their responsibility. For instance, the increased use of steel and concrete demanded greater knowledge and more scientific training. He understood that as soon as the membership reached the thousand mark they intended to introduce examination.

The President, in replying, said that they had not forgotten the labours of Sir Clement in the House of Commons in connection with the first Architects' Registration Bill, and although Sir Clement was not at present associated with that assembly, it must be a matter of considerable satisfaction to him to know that the revised Bill last session passed its second reading in the House of Commons. Turning to the affairs of the Faculty, the speaker said that when the membership rose from its present figure of 990 to the thousand mark, which was expected soon, the Faculty would be in the position to bring into operation a system of entrance by examination, an objective which was the soundest one the Council could aim at to consolidate the position already attained and to uphold the status of the Faculty.

During the year they had lost several of their staunchest members, who had "passed over the border," chief of whom were Mr. Andrew Browne and Mr. Lawton. He then referred to the proposed revision and consolidation of the heterogeneous collection of building by-laws and regulations under which architects and surveyors had to work. For some considerable time the Faculty had been pegging away at this question through the medium of their journal, and it was with considerable pleasure that they found that a general movement had at last been inaugurated to put an end to the absurd and out-of-date system and to formulate a national and scientific code of regulations in accordance with modern methods of building construction and the increased use of new materials. On the subject of Registration there was one vexed question still at issue with the promoters, that of representation for the Faculty of Architects on the Discipline Committee, which would deal with persons whose removal from the register was proposed. The Council maintained, and were fighting strongly for, the principle that that judicial body should comprise a representative of each architectural organisation whose members were likely to come before that tribunal.

The toast of "The Guests and Kindred Societies" was proposed by Mr. W. G. Percy (Past President), and Mr. R. Harry Stanger, President of the Institution of Structural Engineers, replied.

During the evening the President presented Mr. W. G. Percy (Past President) with a medallion in recognition of his services during his year of office.

FACULTY OF SURVEYORS OF SCOTLAND.

The annual dinner of this Faculty was held in the Central Hotel, Glasgow, on Thursday, December 11, under the chairmanship of the President, Mr. J. Parnie Dansken. Amongst those present were Sir John Gilmour, M.P., ex-Bailie John Jubb (representing the Lord Provost of Glasgow), Mr. Robert Robertson, Professor J. Graham Kerr, Deacon Alex. B. Swan, Deacon Robert Hendry, Mr. David Allan Hay, Councillor Malcolm B. Macrae, Mr. John Watson, Mr. Alex. Blair, Mr. C. R. Douglas, Mr. Thomas Somers, Mr. Robert Horn, Mr. James M. McPhie, Mr. Donald Stewart, Mr. George Eaglesham, Councillor J. A. W. Kirk, and Mr. Alex. R. McFadyen, Secretary, Faculty of Surveyors of Scotland. Many ladies were present.

Sir John Gilmour, proposing the toast of the "Faculty of Surveyors of Scotland," said that in the Royal Charter of the Faculty, granted in 1913, was recorded not only their history, but also their high hopes for the future. The hall-mark of their society had been the integrity and honour of their profession, and that in public life counted for a great deal. As a late Minister of the Crown, he would like to express not only his own appreciation of the Faculty's work, but also the appreciation of the great Civil Service of this country, who fully realised the value of what they did. These were days of great difficulty, but whatever their outlook might be, they ought not to be over-pessimistic. Courage was one of the great qualities of the British race, and the greater the difficulties the more necessary it was to realise that those who had gone before had achieved things by personal courage and by incessant labour.

The President, responding, said that as members of the Faculty they took great pride in the fact that Scotland was the first country in the world to inaugurate a mode of measurement of its own. At the present moment, however, the modes of measurement were being revised, and he sincerely hoped that the revision would tend to simplification. He was glad to say that their profession was every day becoming more widely known, and in this connection he was very pleased to intimate that the Corporation of Glasgow and the Education Committee fully recognised the Faculty of Surveyors of Scotland, and did them the honour of entrusting them with many of their building contracts.

Professor J. Graham Kerr, proposing the toast of "The Corporation of Glasgow," referred to the many activities so ably carried out by the Corporation, and remarked they were all very proud of their civic representatives in the great work they performed for the citizens.

Mr. David Allan Hay, proposing the toast of "The Dean of Guild Court," referred to the formation of the Court 225 years ago, and said that in these democratic days, when many imagined that the ills of the times could be solved by the ballot-box and by popular assemblies, it was perhaps strange that nine citizens of Glasgow who did not owe their position to popular election sat in judgment upon every alteration in the city, and could prevent all kinds of private adventure in the way of building and the infringement of the rights of neighbours. This was an interesting survival of pre-democratic days, and it was interesting because it worked satisfactorily. He had never heard in Glasgow any complaint that the Court was prejudiced, or in any way unfair.

Ex-Lord Dean of Guild Robert Robertson replied.

Mr. C. R. Douglas, Vice-President of the Faculty, proposed the toast of "Kindred

Associations and Guests," and Mr. John Watson replied.

Mr. Fred Smith proposed the toast of "The Chairman," to which the Chairman replied. A very enjoyable evening was brought to a close by the whole company joining in the singing of "Auld Lang Syne."

MANCHESTER SOCIETY OF ARCHITECTS.

Mr. J. T. Halliday, presiding over the annual dinner of the Manchester Society of Architects in the Masonic Temple, Manchester, remarked that Manchester furnished one sublime example of the absolute need for town planning. It was the work of town-planners to keep civilisation tidy. Referring to Wythenshawe, he said that they were anxious that it should not be another Kingsway. They as architects had placed their services at the disposal of the Corporation in the hope that in some way they might stave off such a fate from that very beautiful piece of Cheshire. They had a scheme to help speculative builders to build in the suburbs with more general success. They could help a great deal, and they hoped that in the future the work of speculative builders would not be in the nature of a blot on our suburbs.

Dr. Raymond Unwin, adviser to the Greater London Town Planning Society, responding to the toast of the Royal Institute of British Architects, which Mr. Halliday proposed, said that architects belonged to probably the most enjoyable industry in which anyone could spend his life. They had new materials and new sciences, and it was difficult to keep pace with them. They could only do it by holding fast to the main broad principles of design, for they would remain true. They had also to realise that tradition, originality and experiment were not in conflict, but were complementary. There was going to be a great field of practical work for architects to cover in the next few years. They had to see that the great quality of design was added to the large section of building work in this country which at present was going along without design. Materials were merely being put together without relationship or proportion one to the other, and they had no effect beyond a corrupting effect upon the public. If this continued they would not be able to keep that sense of unity of purpose between the public and those who were building, which was essential if they were to make architecture a great art. If they could get builders to realise what was meant by design and that architects really contributed something which would make their buildings more amenable to clients and which would create something pleasurable to look upon, they would not want to go on putting up ugly buildings. It was necessary, because the country was being more and more disfigured by an ugly type of building. He believed that both the public and the builders would respond.

Professor Patrick Abercrombie, president of the Liverpool Society of Architects, pointed out that rural England, except for the wildest parts, had been largely created by man, and their job was to produce something which was even more beautiful than that which had been there before. Twisting the old tag, he remarked that, unless they were careful, what Manchester looked like to-day the English countryside would look like to-morrow. The great schemes of slum clearance would give them opportunities of adding beauty to their towns, but it was essential that they should have cleaner atmospheres.

Board of Education Examinations in Art.

The list of successful candidates, awards, examiners' reports and examination papers for the 1930 examinations in art of the Board of Education are now issued and may be obtained from H.M. Stationery Offices, price 4s. 6d. net.

PLUMBING TRADES COUNCIL

In a communication received on the subject of apprenticeship from Mr. John H. Hamlin, hon. secretary of the Plumbing Trades Central Apprenticeship Council for London, it is stated that about twenty-three years ago a body of men having the plumbing trade at heart met together to discuss the future of the craft, and, in view of the fact that the only entry into the trade at that time was through the mate system, decided, if possible, to revive apprenticeship. A council was formed, and periodical meetings took place, but in 1914 and during the war period the matter was dropped, but was revived again in 1916, and the first indenture was signed in 1918, and a total of twenty had been reached in 1925. Since that year the indentures of apprentices have averaged approximately eight per year up to the present. Four annual gatherings of employers and their apprentices have since been held, and it is hoped to arrange a fifth at the Hammersmith School of Building, recently opened with a class for the instruction of lads in the plumbing industry, and Mr. W. H. M. Smeaton, Master of the Worshipful Company of Plumbers, has consented to give the address.

Apprentices are necessarily not all up to the highest standard, but the employers usually who have adopted the scheme speak very highly of those who have completed their training, and are proving themselves to be proficient operatives, as well as those who hope to become efficient at the end of their terms of apprenticeship. With a view of placing lads who are attending day school classes, rotas were set up at the various polytechnic centres, but through the apathy of the employers in not adopting the scheme of apprenticeship generally, too many of these rotas have become rusty, and some lads have reached an age when they cannot become indentured, and have thus become plumbers' mates or labourers, without any guarantee that they will ever become plumbers.

"Some risks," the document concludes, "must be taken in all efforts towards progress, and it is to be hoped that the master plumbers and building contractors who employ plumbers will face the facts and their own responsibilities. Can it be gainsaid that their own future success is not bound up with efficiency on the part of the craftsmen they employ?"

A COMMEMORATIVE DINNER

Mr. Ernest J. Brown, director of the London Master Builders' Association, on Monday night, at the Connaught Rooms, gave a dinner party to a few colleagues and friends in the various sections of the building industry, to celebrate his 70th birthday. Amongst those present were Lord Amulree, G.B.E (Minister for Air), Lord Burnham, C.H., Sir H. Morris, Sir H. J. Wilson, Wing-Comdr. Vernon Brown, Messrs. A. H. Adamson, B. C. Aldous, W. J. Alflatt, C. J. Bennett, J. McK. Bryce, G. W. Buchanan, G. M. Burt, F. S. Button, Ben Carter, A. B. H. Colls, R. Coppock, A. B. Falkner, Geo. Gee, R. J. Holliday, F. W. Loasby, F. M. May, H. C. Mills, F. A. Minter, J. Murrey, H. Neal, G. H. Parker, E. Pollard, A. D. S. Rice, R. L. Roberts, W. J. Rudderham, G. B. Sharples, L. Shingleton, Wm. J. Stewart, S. Stranks, E. J. C. Savory, J. M. Theobald, C. C. Trollope, C. J. Trollope, E. H. Wall and A. G. White.

Lord Burnham, who proposed the health of the host, said that he had never known a more original and delightful birthday party—not even excepting his own. Friendship was the best thing in the world, and there could be no finer sight than to see "E. J. B.," or the "grand old man" (as he might well say), celebrating his seventieth birthday surrounded by his friends. For himself, he had known Mr. Brown a long time, first coming into contact with him at the end of the War, when Mr. Brown was appointed a member of the Government's Resettlement Committee. When their work on that Committee came to an end, he (Lord Burnham) thought he could say it was the desire of each to see more of the other. Their host was a man of many parts. Brought up to the building industry (his firm was the old-established one of James Brown, Son and Blomfield), he was President of the L.M.B.A. in 1903, President of the Institute of Builders in 1913, and two years later President of the N.F.B.T.E. The building industry was the basic industry of the country, and Mr. Brown had done a tremendous amount to harmonise the various sides of that industry. During the War he was appointed liaison officer by employers and operatives between the Government and the building industry. He served in the Government scheme of National Service and upon the Ministry of Labour Committee for disabled men. He represented the building industry at many sittings of the Committee on Production, which accounted for the fact that when the Industrial Court was formed the Government appointed him a member of that body, a position he still held. Their host also represented the industry on the Council of the Federation of British Industries, and afterwards was one of half a dozen who originated the present body known as the "National Confederation of Employers' Organisations."

Their host had not only worked hard but played hard. He was a cricketer of no mean ability, who could recall an enduring friendship with "W. G." He was an enthusiastic golfer, but altogether on another par was the fact that he at one time was honorary secretary and treasurer of the Lombard Amateur Musical Society, the oldest male voice choir in London. That, said Lord Burnham, was his record, and he knew that everyone in the room would wish to express pleasure at being present at such a celebration.

Mr. J. Murrey, seconding the vote for the operatives, told the company that he had had close connection with "E. J. B." for many years, and that association had given him personally great pleasure. A good many of the operatives' difficulties had been smoothed out by a personal chat with Mr. Brown in the garden opposite 34, Russell-square. Whether the trouble was a mountain or a molehill, one of the first men to ask to help was "E. J. B." He had given of his best in the interests of the industry, not of any particular side. If all industries had similar opportunities to get both sides into contact as readily, there would be far less trouble.

Mr. W. J. Alflatt, on behalf of the London Builders' Foremen's Association, wished their host many happy returns of the day.

Mr. Brown, in replying, asked them first to drink the health of absent friends. He offered his guests his very sincere thanks for the way they had received the toast. Their presence that night was due to an inspiration of his own—that he would like to see some of his friends from every section of the industry together round a common table, discussing, if they thought fit, their common troubles. The industry was in the throes of a very difficult position, but he felt that if all had the same opportunities of meeting the operatives as he himself had, there would be no trouble.

During the evening a most enjoyable programme of music was provided, amongst those who rendered songs being the host and his son, Wing-Commander Vernon Brown. The party broke up at a late hour with "Auld Lang Syne."

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Municipal Houses.

Mr. Simon asked the Minister of Health if he would state what was the number of houses completed by the municipality in each of the last five years in Birmingham, Liverpool, Manchester, and Leeds respectively.

Mr. Greenwood said that the following statement gave the number of houses erected with State assistance by each of these municipalities:—

	Year ended September 30.				
	1926	1927	1928	1929	1930
Birmingham	4,817	4,849	3,183	3,278	6,829
Liverpool	2,362	5,649	2,623	1,187	1,022
Manchester	894	1,679	3,387	2,392	1.598
Leeds	538	1,049	384	780	632

Protection of Rural Amenities.

During the discussion in committee on the Agricultural Land (Utilisation) Bill, which, among other things, proposes to set up an Agricultural Land Corporation to acquire land and use it for the purpose of demonstration farming, Mr. Ormsby-Gore, a Unionist member, moved an amendment to exclude from such acquisition land declared by a resolution of the local authority concerned to be required for the preservation of rural amenity, and land which is the site of an ancient monument or other object of archæological interest. As an example of the land referred to in the first part of the amendment, Mr. Ormsby-Gore instanced the case of Lord Astor's farm at Cliveden, which abutted on the Thames, and, by special arrangements with the local authorities concerned, had been declared a private open space, not to be taken over as for public purposes. It was to be kept as one of the reaches of the river, as being of definite amenity value to the country as a whole. It was very desirable that, in the many necessary economic developments of our modern age, beauty spots might be swept away, and he urged that they should be protected. As to ancient monuments, he said that they were not yet all scheduled. In counties like Wiltshire there were many objects of archæological interest, and the most notorious example was the tragedy of Avebury, the greatest of our stone-circles; greater and more historically important even than Stonehenge. Yet Avebury had been literally turned into a farm; some of its stones had been used in building the farm, and others had been cleared off without any safeguards. He urged that the State should set an example in these matters.

Dr. Addison, the Minister of Agriculture, expressed sympathy with the amendment, but feared that the wording would not properly meet the case. As Chairman of the National Parks Committee he knew something about these matters. In the case of Lord Astor's arrangement with the local authorities the spot would be scheduled as a planning scheme, and any area or beauty spot so scheduled and acquired by the Corporation would still be under the provisions of the Town Planning Act. The Corporation would be in the same position as a private owner. But the amendment would mean that the Corporation would be at the mercy of any local authority who happened to say that certain land was a beauty spot. As to ancient monuments, where they were scheduled for preservation they could not be taken by the Corporation. But the amendment would mean that the Corporation could not acquire any land on which stood an abbey or a ruin. He agreed that the Corporation should be subject to as strict a supervision and control as any private owner, and he promised to see what could be done before the report stage.

On this assurance the amendment was withdrawn.

Ancient Monuments Bill.

In the House of Lords, Lord Ponsonby moved the second reading of the Ancient Monuments Bill, a measure on which, he said, there was substantial agreement. An Act passed in 1913, upon which now all the activities of the Ancient Monuments Department were founded, introduced an element of compulsion and the idea of scheduling or listing ancient monuments. Since that time something like 3,000 had been scheduled. The Act of 1913 also empowered the Commissioners to give advice, and in many cases advantage had been taken of that provision. The Commissioners were also empowered to buy, accept or become guardians of ancient monuments, and something like 280 ancient monuments had been handed over since that date. The whole scheme of preserving ancient monuments had greatly increased during the past ten years. The introduction of motor-coaches had increased the number of visitors to such places. In 1924-25 there were 160 of these ancient monuments, which were visited by 275,000 people, the receipts for admission being £5,541. Last year there were 223 of these monuments; 493,000 people visited them and the receipts amounted to £9,839. In addition to ancient monuments there were certain historic buildings, such as the Tower of London, Carnarvon Castle, Carisbrooke Castle, Edinburgh Castle and so on. In 1924 the receipts from admission fees to such places amounted to £23,000, while in 1929-30 they were £26,814. The amount of money spent on ancient monuments had varied during the past five years between £45,000 and £55,000. These places, under the guardianship of the Office of Works, were admirably preserved, and he paid a tribute to the interest shown in this Department by successive First Commissioners of Works during the past 10 or 15 years, as well as to the zeal and enterprise, intelligence and good taste of the Permanent Secretary to the Office of Works, Sir Lionel Earle. He also paid a tribute to the exact and profound knowledge and indefatigable activity of Mr. Peers, the chief inspector.

There were new elements introduced by the Bill, but a great part of it consolidated and extended the Act of 1913. The chief of the new elements was in Clauses 1 and 2, which gave power to the Commissioners to prepare schemes for the protection of the surroundings of ancient monuments. Those schemes would be on the lines of town-planning schemes, but town-planning was not enough; a central authority was necessary. This provision had been very much brought to the front by the threat to the amenities of Hadrian's Wall. Although the Wall and the vallum to the south of the Wall were both scheduled by the Office of Works, the ground between them or near the Wall did not come under the control of the Department, and could not, under the Act of 1913, be protected by them. Fortunately, the gentleman who was conducting quarrying operations near the Wall had agreed not to do anything which would imperil the Wall, and there was no immediate danger.

But that was only one instance of many where it was necessary, in order to preserve these monuments adequately, to have the power to acquire certain sites and land round them. Another instance was Stonehenge. If the Bill had been law it would have been possible to acquire the land round Stonehenge, say, a square mile of it, in order to preserve that very interesting ancient monument and prevent buildings and unsightly huts being erected round it, and it would have saved the public from a heavy sum which had to be raised to acquire the land. Had the land been acquired by arbitration the amount of compensation, he had no doubt, would have been very much smaller.

In Clause 2 there was provision for compensation and betterment. It was not anticipated that there would be many claims for betterment. Clause 3 gave power to the Commissioners to contribute to the expenses of local authorities making schemes which would have the effect of protecting the surroundings of ancient monuments. Clause 10 prohibited the export in whole or part of an ancient monument, whether it was an occupied dwelling-house or not. This was a new provision, which might be subjected to certain criticism. Houses had been taken down and exported, and others had had valuable features wrenched away and exported. The number of those cases had not been very great, but with the advance of engineering, there would be no difficulty about shifting a house from one Continent to another, and it was thought desirable to make provision to prevent that eventuality. Apart from the clauses dealing with acquisition of land round ancient monuments, compensation and betterment, and prohibition of export, the Bill only consolidated and slightly strengthened the existing Act.

Lord Danesfort expressed sympathy with the purpose of the Bill, but he considered that the clause giving the Commissioners power to make orders prohibiting export was too wide.

Lord Ponsonby said he would be ready to pay attention to any criticisms which might be made in Committee.

The Bill was read a second time.

A National Housing Authority.

In the Commons, Mr. McGovern, one of the Clydeside Members, asked leave to bring in a Bill to provide for the provision of houses and housing materials by a national housing authority. He said it was generally admitted that the only thing of which there was a shortage in this country was housing for the common people, and he desired to bring in the Bill to meet that shortage. It would be necessary to acquire land throughout the country, and to get control of factories in order to provide for the materials that would be essential. The control of all factories would be essential, so that the object of the Bill, to provide houses at cheap rentals, would not be defeated by those who were in control of materials raising prices unduly high. Materials would be produced at low prices in national factories. He maintained that local authorities at present were dominated and controlled by property owners, who did everything in their power to prevent the erection of working-class houses on a large scale, because it would tend to reduce rents and prevent them from acquiring the great profit which they desired. There were in this country 150,000 unemployed men who were trained in the art of building houses. They took every week £250,000 from the Unemployment Exchanges, for which the nation got no return. It would be better to put that money into a great housing scheme, and he proposed a five years' plan to deal with the housing shortage. For that it would be essential to provide a loan of £500,000,000; so that £100,000,000 could be spent annually. £50,000,000 of that would be spent in labour, so that they could put forward an army of 350,000 men to provide houses. They would work for five years for £3 a week average wage. This scheme would reduce unemployment and provide houses.

Leave was granted by 161 votes to 100, and the Bill was brought in.

Slum Clearances.

Mr. Greenwood informed Mr. White that he had received resolutions from 18 local authorities, declaring 50 areas to be slum clearance areas.

Rural Housing.

Major Glyn asked the Minister of Health whether, in view of the small number of houses that were being reconditioned under the provisions of the Housing (Rural Workers) Act, compared with the number to which the Act applied, he would issue a circular to local authorities on the subject.

Mr. Greenwood said that several circulars had already been issued to local authorities on this subject, and a good deal of publicity had been given to it in other directions. He doubted whether the issue of a further circular would have any material effect.

NOTES ON LONDON BUILDING ACT, 1930

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., etc.

IX.—MEANS OF ESCAPE IN CASE OF FIRE.

Part VIII. of the Act in effect re-enacts the provisions of the London Building Acts (Amendment) Act, 1905, this last-mentioned Act being entirely repealed by the Act of 1930

For the purposes of this part of the Act, definitions are given of the terms "new building," "old building," "owner," "plans," and "rack rents"

Of these the term "owner" may be particularly noticed. It means "the person for the time being receiving the rack rent (*i.e.*, rent which is not less than two-thirds of the full annual value of the premises) of the premises, whether on his own account or as agent or trustee for any other person." The same meaning of "owner" is given in section 250 of the Metropolitan Management Act, 1855; in section 42 of the Public Health Act, 1875; and in section 141 of the Public Health (London) Act, 1891, severally.

In Driscoll *v* Battersea B.C. (1903), 1 K.B. 881, a builder under an agreement was entitled to enter on land to build houses, and a lease was subsequently to be granted him of each house as and when erected. As a fact, no houses were erected. It was held that he was not the owner of the land within section 250 of the Metropolitan Management Act, 1885. His rights were merely contractual, as he had not become entitled to a lease.

A mesne tenant who receives rents from parts only of premises, is not the owner of these parts or of the whole, though the total rent he receives is equal to or exceeds the rack rent. (See Kensington B.C. *v.* Allen (1926), 1 K.B. 576.

Any person who receives the total rack rent as rent becomes the "owner" within the definition. In Watts *v.* Battersea B.C. (1929), 2 K.B. 63, a solicitor who collected rents for an administratrix was held to be the owner.

Under section 96 of the Act it is provided that every new building (except a dwelling-house occupied by not more than one family), the building being either a high building or a building in which there is accommodation for more than twenty persons, or one constructed or adapted to be occupied by more than twenty persons, or in which twenty persons are or might be employed, is to be provided with means of escape in case of fire. The owner must deposit plans, showing the means of escape, with the County Council when he serves the building notice on the district surveyor, and the County Council may reject, approve, or approve conditionally, what is proposed. No upper story of a high building, and no part of a twenty-person building can be occupied, or let for occupation, until the County Council grants a certificate to the effect that sufficient means of escape have been provided.

It has been held, however, that the deposit of plans is not necessarily a condition precedent to such occupation, and the defaulting owner can appeal. See L.C.C. *v.* Spink and Son, Ltd. (1908), 2 K.B. 447.

It should be noted that if an owner does not appeal, within two months, against the requirements of the County Council in respect to his plans, but proceeds to erect without complying with the Council's requirements, he cannot (in the event of the County Council refusing to grant him a certificate) appeal on the ground that the requirements of the County Concil are unreasonable. He can only appeal on the grounds that the buildings comply with the plans which were conditionally approved by the County Council and that the certificate has been *wrongfully withheld*. The Tribunal of Appeal has no jurisdiction to decide whether a building has proper means of escape from fire. See L.C.C. *v.* Clark (1912) 1 K.B 511.

Section 98 of the Act deals with shop fronts which project for a distance of 7 ft. or more beyond the main front of a building of which the shop front forms a part, and in which any persons sleep or are employed. The roof of the projecting portion is to be of fire-resisting materials at least 5 in. thick. Provision is made for the insertion of lantern lights or ventilating cowls (subject to certain conditions) in the projecting roof.

In L.C.C. *v.* Cannon Brewery Co., Ltd. (1911), 1 K.B. 235, a public-house which stood at the corner of Euston Road and Charlton Street had its ground floor projecting beyond the wall of the main building for a distance of 49 ft. on the Euston Road face. The length of frontage on the Charlton Street side was 86 ft., and that in Euston Road only 21 ft. The magistrate had held that the "main front" was in Charlton Street. It was held that he was justified in so finding, and, since no part of the building projected beyond the main front in Charlton Street, the projection in Euston Road did not contravene the requirements of the section.

Reference might here be made to the recent case of Att.-General *v.* Prices Tailors (1928), Ltd., L.R. 1930 2 ch. 316, where there was a decision as to the meaning of the front of a building in an action for a declaration that the defendants were not entitled to build beyond the prescribed building line; and for an order on them to remove so much of a new front of a shop as projected beyond that line. It was held that "the front" included the exterior walls of two upper floors as well as the exterior wall of the ground floor, which projected a few feet beyond the walls of the two upper floors.

In the case of old "high" or "20-person" buildings, the onus of seeing that means of escape is provided lies on the county council, who may serve a notice on the owner requiring him to provide (if none already exists) proper means of escape in case of fire, and specifying what is to be done to establish proper means. The owner may, however, submit alternative proposals within 21 days, and the County Council may, if they think fit, adopt these instead of their own.

Section 100 requires means of access on to roofs (by a dormer window, trap door, etc.) to be provided to old buildings having projecting shop fronts, and also to every other existing building (other than dwelling houses occupied as such by not more than two families), and to all new buildings; but buildings of not more than two stories above the ground story, and not exceeding 30 feet in height, are exempt.

The section, however, does not apply to buildings coming within the stricter requirements of sections 96 and 97. In L.C.C. *v.* Cannon Brewery Co., Ltd. (1911), 1 K.B. 235, it was held that a public-house occupied by the tenant, his family, and a large staff is excepted from the provisions of this section.

When any building is converted it must comply with this part of the Act.

All means of escape are to be maintained, and the owner is entitled to enter and perform any work necessary, notwithstanding any provisions contained or implied in any lease.

The work is to be done to the approval of the district surveyor.

Regarding expenses occasoned to the owner in executing any work under this part of the Act, he may apply to a County Court for an apportionment amongst the several persons entitled to any estate or interest in the building concerned, after reference to the terms of any lease or contract affecting the building is made. In Monro *v.* Burghclere (1918), 1 K.B. 291, the lessee had agreed to pay all outgoings which might subsequently be imposed by statute. It was held that the County Court judge had been right when he held that the lessee must bear under this covenant the whole burden of the expenses.

An occupier of any building who sustains any damage caused by the construction of any works carried out under this part of the Act, is entitled to have his claim settled by arbitration. The arbitrator determines how damage is to be borne by the several persons interested, taking into account the lease or contract and all the circumstances of the case.

INQUIRY BUREAU

Cost of Working-class Houses.

[Reply to "Planner," December 5.]

Sir,—9d. to 10d. per foot cube is an average cost for two-storied dwellings. I believe the average L.C.C. three-storied flat works out at about 11¼d. per ft. The four-storied blocks probably work out at a little more.

Figures.

Reinforced Concrete Bath.

Sir,—I should be glad of any information on the following matter. A client of mine has in his house a bath which is apparently cast in reinforced concrete, the large aggregate being marble chips. It is of Belgian manufacture, and I have not so far succeeded in finding the name of the manufacturer. The inner surface of the bath has started to flake off, and is apparently gradually breaking up. My client does not wish to put in a new bath if it is possible to put the existing one in reasonable condition again.

Is there any likelihood of a repair, made by patching with a concrete of either Portland cement or a special cement and marble chips, being effective even as a temporary repair?

L.

Damp Wall.

[Reply to "W. S.," December 5.]

Sir,—Your correspondent mentions the only certainly permanent way of curing the porosity of the wall. The use of a purely surface treatment may have a temporary effect, but there is no certainty of its remaining effective over a number of years.

Thorough.

Composition Flooring.

[Reply to "F. D.," December 12.]

Sir,—Pugging of the type mentioned is a very effective sound insulator, but it entails a certain risk of setting up dry rot in the floor joists. If it is used, the joists should be well coated with creosote, care being taken that none falls upon the top side of the plaster ceiling under, as it will soak and spread a long way, with no possibility of curing.

Air.

Central Heating.

Sir,—A client for whom we are about to install a central-heating system has asked us whether there are any grounds for the suggestion that the peculiar dryness of the atmosphere is likely to be injurious to health. We understand that in America, art pots, etc., containing water are placed on, or in the vicinity of, the radiators, and we should like to know whether this meets the objection—assuming it to be well founded—and how much water should be exposed.

Inquirer.

Cost of Small House.

Sir,—I am in need of a dry and warm house of modern construction, having four fair-sized apartments and bathroom. What are the conditions of the Government subsidy on a house built and occupied by the owner. How much would it cost to build and finish a house as above? Information on these points would be greatly appreciated.

House Buyer.

House Drains and Public Sewer.

Sir,—I should be obliged if any experienced reader could help me in this matter. A scheme for a new town sewer involves in its ventilation the use of all house-drain ventilators by cutting out all interceptor traps and foul-air inlets. The question now arises: Where is the dividing line between the house drain and the public sewer? Is up to the vent pipe an answer to the question, or does it all become the public sewer?

Concerned.

THE BUILDING TRADE

RECURRING DEFECTS: THEIR CAUSE, PREVENTION AND CURE.—XXIV

By J. R. TAYLOR

BUILDING WITHOUT ARCHITECTS.

Before concluding this series of articles it may be desirable to remove any mistaken impression they may have created as to my estimate of the value of the services of architects. My title has demanded that these articles should in the main be critical. A defect is no less objectionable in itself whoever is to blame, be he architect or builder, and although I have made frequent reference to the architect in respect to this, it must not be supposed that I in any way underrate either his difficulties or his services. I gladly acknowledge that it is only by reason of a life-long association in various capacities with architects doing good work that I know bad work when I see it.

It is, however, a deplorable fact that a very large proportion of our buildings are erected without the services of architects. In commenting on this, some writers have placed the percentage of building controlled by architects as low as 20 per cent. But taking those eligible for registration under the R.I.B.A. Bill into this account, I consider that at least twice as much building is designed by men who would rank for enrolment as compared with that for which the builder or his assistant draws the plans.

The causes that operate against the better employment of architects are numerous, and I believe the principal one to be the aloofness of so many members of the profession, though another formidable cause is the unfair competition of what may be termed "part-time" architects. Employed in the drawing offices of manufacturers of various goods used in building, many of them are not only permitted, but encouraged, by their employers to prepare plans in order that their (the employers') products shall be used in the work.

But the competition that is most difficult to meet is that of the builder, and it is in respect to this that the protest from the architect is most often heard. The average builder would on the whole rather be excused the responsibility of preparing plans, but is frequently called upon to do so by customers whom he cannot afford to offend. As it is, he not infrequently advises that an architect should be engaged and would do so in nearly all cases if he felt safe. Let us take a hypothetical case—a builder who is consulted by a customer as to what can be done by throwing out a wing to a fine old house. He may reason somewhat as follows:—"My customer wants some more bedrooms and an additional bathroom. To get these, the idea is that he will have a billiard-room for which he has always had a desire, but the whole thing must not cost too much. His wife, however, is not much interested in the billiard-room, and would rather have the kitchen enlarged and a room added for servants' sitting-room. Now, it is a pity to spoil such a fine old house, and it is really a job for an architect to reconcile their ideas."

Our builder has here come to a sound conclusion, but, unfortunately, business always being business, his train of thought must be carried further and may be continued thus: "If I recommend old Sepia he will full-size detail every inch of it and be so optimistic as to cost that my estimate will look extortionate. If, on the other hand, I recommend young Vandyke Brown, he will want half a dozen estimates without quantities, and Push and Go, who have been trying to get in for years, will cut it to the last penny so as to get a customer like this on their books."

Our builder is again soliloquising: "Mrs. Newlywed likes that villa I built for Sugarbowl when he retired. She is his niece and knows what it cost. Carton Pierre got out the plans before he died and made a hobby of joinery details. He even, in his details, made a distinction between the architraves on the kitchen and scullery windows, and what with one thing and another I made no profit at all. Now, if I use stock mouldings, stock doors and keep all sizes to imported thicknesses and widths, I can save a bit there. I will get out a half-inch plan and work the sizes of all rooms, etc., so that all my timbers run exactly to feet lengths instead of cutting nine inches to waste on each piece. I can also use up those bathroom tiles I have had in stock for so long and a lot of those samples of ironmongery which, if kept much longer, will want relacquering. One way and another I can give her just as good a job and make a profit. All I need is a site survey for the drains."

Now if the builder can rely on keeping his customer by recommending an architect he generally possesses enough of the spirit of true craftsmanship to prefer this course. Generally speaking, he would be quite prepared to meet the architect on the question of a fair price by agreeing that the quantity surveyor should price the estimate.

But apart from domestic buildings there are many others on which it is the exception rather than the rule to employ fully qualified architects. Warehouses, garages, stores of various descriptions, barns, stabling and shippons and many others where utility takes precedence of all else except cost, are very often designed by the builder or by a spare-time architect, whose services up to the point of providing a plan for the local authority and a tracing for the job may be had for very moderate fees. This class of work would more frequently be given to architects willing to accept it if they were content to prepare a plan and tracing only (at moderate charges) and confine their specifications, if any, to a few notes more or less in the nature of suggestions. In such work as this they do more harm than good by suggesting that the builder needs supervision in order that the owner shall have a square deal. To put it quite plainly, this claim is one that would be resented much more strongly if it were not common knowledge that builders are as honest as their neighbours and readily respond to the trust placed in them.

But it is in respect to small alterations and extensions that owners are often unwise. Many a building of good design and pleasantly mellowed by time has been completely disfigured by having some ugly feature "tacked on" to it, displaying a complete want of taste and lack of knowledge of style. It is unfortunately true that this is an offence that is sometimes committed by men who claim to be architects, though, of course, it is far more frequently due to the non-employment of a real architect. This is another instance where no very elaborate service is required, and many builders would be glad to disburse a couple of guineas for a pencilled elevation but feel diffident in offering such work to the architect. It is true that it would sometimes happen that when he passed that way an architect might find his idea so mishandled as to make him wish he had not been connected with it, but, on balance, the results would be better.

I have quoted a case where, Carton Pierre being dead, the builder has made free with his plans. It happens sometimes that poor Carton's death is not waited for, and his design, or a part of it, is "lifted" in his lifetime. This cannot be overcome by recalling the drawings at the end of the job if, as is generally the case, an insufficient number of copies are supplied and the builder has to make good the deficiency by taking tracings. But it has to be remembered that it is not often that the plans copied are of recent origin, and as a rule but little of an architect's work is appropriated during his lifetime. Some architects publish plans in book form, and the builder is canvassed to buy the books. Many builders would be surprised if told that these published plans must not be made use of.

The problem to be solved is a very difficult one, and I make no pretence of being able to offer a cut-and-dried solution. What I do see is that it is very desirable to bring the architect and builder closer together in such a way that it may come to be understood that they have many more interests in common than is often supposed! Methods that were suitable to times when but few builders could lay claim to being educated men are in need of overhaul. What it all amounts to is that the last forty years have witnessed a general levelling of the classes and the old distinctions are rapidly passing away.

(To be concluded.)

THE CORROSION OF STEELWORK

Mr. Ulick R. Evans, of Cambridge University, in lecturing at Liverpool to the Society of Chemical Industry on "Protection of Metal by Painting," referred to the corrosion of steel-framing. The alkali content, he said, of concrete had been very carefully studied in America during the demolition of skyscrapers. Where there was chloride present, the chloride interfered with the action of the alkali. The chloride irons could penetrate the protective oxide film, and there was very serious corrosion. The volume of the rust produced could cause the concrete to crack. It was particularly bad when one got stray electric currents from tramways and so on.

Before discussing protective paints, the lecturer said, one must study corrosion. The rusting of iron was not a direct oxidisation process; indeed, the invisible oxide-film produced by the direct action of air on stainless steel protected it against corrosion. On ordinary steel the corresponding invisible film gave no protection unless an oxidising agent was present to repair the skin as soon as a breakdown occurred. The addition of potassium chromate to cooling-water to preserve the steel jackets, and the use of red lead or lead-chromate in paints, were examples. In the absence of such substances, steel suffered corrosion when wetted. Electric currents passed between the anodic places, where the skin was in bad repair, and the cathodic places, where it was in good repair. Most paint vehicles, whether linseed oil or nitrocellulose, absorbed some water, and unless the lowest coat included some anti-corrosive substance, attack would occur when the painted steel-iron or steel was wetted. The oil-vehicle was the most unstable part of a paint-coat, and should be reduced to a minimum. At Cambridge and other places they had demonstrated that paint applied in the afternoon lasted far better than painting done at sunrise, which had shut in an invisible moisture-film usually present early in the day. The conditions of paint required in different places varied so much that paint manufacturers' salesmen should be chemists. Salt, if shut in under paint, as at the seaside, would draw in water and cause failure.

THE BUILDING RESEARCH STATION

QUESTIONS AND ANSWERS.*

We have received from the Information Bureau of the Building Research Station the following abstracts of inquiries, which represent a number of those recently submitted to the Station. The information given in the replies quoted, it is pointed out, is based on available knowledge. It has to be borne in mind that further scientific investigations may in the course of time indicate directions in which the replies might be supplemented or modified. Moreover, the replies relate to the specific subject of each inquiry, and are not necessarily suitable for general application to all similar problems.

Cracking of Asphalt Roofing on Concrete.

The Building Committee of an education authority reported that considerable trouble had been experienced due to cracking of mastic asphalt laid on concrete roofs. Some of the large cracks had been repaired by inserting a new strip 4 or 5 in. wide, but usually when this had been done a permanent cure was not effected, and now cracks developed near the joints. Various suggestions for repairing the cracks with asphalt mastic had been proposed by the firms who laid the original asphalt.

Reply.—The case reported is very similar to one previously investigated. The cracks appeared to have a structural origin and it was finally concluded that there was very little hope of stopping them with any plastic treatment. With cracks of structural origin periodic movements are almost inevitable and there is a tendency for any seal to be broken. It is probable, that the best asphalt mastics are capable of accommodating quite appreciable movements of the supporting structure, and cases have been investigated where serious expansion and cracking of a concrete roof slab had not cracked the asphalt.

In the case previously investigated repeated attempts at patching had proved unavailing and surface treatments with bituminous compositions had also failed to give any lasting satisfaction. It was finally decided to cover the roofs with a three-ply bitumen felt, mopped down with hot bitumen, and finally covered with a layer of bitumen and gritted. It was hoped that a pliable membrane of this kind would be able to accommodate itself to the movements likely to take place at the cracks. It was suggested that by omitting the bitumen dressing for a space of about 6 in. on either side of the worst of the cracks still further freedom would be provided for possible movements.

Blistering and Spalling of Plaster from Brickwork.

An architect encountered an unusual case of defective plaster work. The building in question was 11 months old, had 9 in. solid outside walls faced externally with hard machine-made red bricks, and internally with foreign stock bricks which were hard in some cases, but soft on the average. The brickwork was laid in lime mortar. Internally the walls were covered with 2-coat plaster, which, throughout the house, but not on breeze partitions, was found to be rising in blisters and falling away. Examination showed that behind each blister the internal face of the brickwork was decaying rapidly and was encrusted with a white substance. Samples of brickwork, plaster and the white incrustation were forwarded for examination, and the inquirer wished to know whether it would be safe to replaster the walls entirely with Portland cement and sand for the backing coat.

Reply.—The spalling of the plaster is evidently due to crystal growth resulting from the presence of soluble salts in the bricks. The crystalline material giving rise to the trouble appears to be magnesium sulphate in an almost pure condition. The fact that the crystals have formed behind the plaster is due to interaction between magnesium sulphate from the bricks and the lime contained in the plaster. The mechanism causing failures of this kind has been investigated, and is discussed in a letter to "Nature," by F. L. Brady, of the Building Research Station, in the issue of November 1, 1930, page 684.

It is difficult in cases of this kind to suggest a treatment which will be entirely satisfactory. The use of any plaster containing lime would be liable to lead to a repetition of the failure. There is also the possibility that moisture is penetrating the wall from the exterior, and this may result in efflorescence due to crystallisation of soluble salts on evaporation of moisture at the inner face.

Replacement of the plaster by Portland cement cannot be recommended since, when set, the cement contains lime, and, as there probably is still some magnesium sulphate in the bricks, failure would be likely to occur again. The best courses to follow are considered to be the following:—

(1) To plaster with a gypsum plaster, which does not cause crystallisation to take place at the junction of the brick and plaster. Unfortunately, in the absence of any formal specification for gypsum plasters, these display considerable variations in composition and a number are alkali accelerated, and so would be unsuitable for the purpose.

(2) The use of aluminous cement, in an endeavour to produce a dense layer which will reduce the rate of transmission of moisture and so reduce the rate of evaporation and crystallisation of the salts. Aluminous cement itself is relatively immune from the action of magnesium sulphate. It is not absolutely certain that crystallisation will be prevented in this way, but the likelihood of further deterioration is less than with Portland cement, and very much less than with lime plaster. There would, of course, be some danger of trouble with visible condensation of moisture on a dense impermeable finish of this kind.

(3 The simplest expedient would probably be to batten the wall, and to plaster on lathing or, alternatively, to apply one of the various types of fibrous wallboard or plasterboard to the battens. In this way there would be no direct capillary contact between the lining and the brickwork.

Deterioration of Reinforced Concrete Floor in a Margarine Factory.

It was reported that trouble had been experienced in a margarine factory through the flaking off of large pieces of concrete. This appeared to be due to water percolating through the reinforced concrete floors and setting up corrosion of the steelwork embedded in the concrete.

It was reported that a fairly strong solution of soda ash had been regularly used in cleaning the floors. The inquirer wished to know whether the use of soda ash has any deleterious effect on concrete, and whether its corrosive effects on steel would be greater than that of water alone?

Reply.—Soda ash has no marked deleterious effect on concrete or cement, nor will it set up corrosion in steel reinforcement, and will tend rather to reduce any corrosive action set up by other agents. From the fact that the regular use of soda ash is required, it is assumed that the oils used in the manufacture of margarine find their way on to the floor. Such oils are known to have a marked deleterious effect on concrete, and the products of their decomposition may attack constituents in the cement and would be liable to promote corrosion in steel with which they may come in contact.

It is possible, of course, that disintegration of the concrete might be accelerated by crystallisation of soluble salts derived from the soda ash (or the products resulting from its reaction with constituents of the cement) with acid gases in the atmosphere. In view of the known destructive effects of animal and vegetable oils, however, this is not considered likely to be such an important factor.

Deterioration of Concrete Floor in Cooked-Meat Factory.

Architects reported that the concrete floor of a cooked-meat factory had shown signs of serious deterioration under the effects of hot animal fats. They wished to know what would be the most suitable floor finish to withstand such action, and whether jointless magnesium oxychloride flooring would be satisfactory?

Reply.—It is probable that asphalt or floor tiling would be resistant to the action of hot fats and acids derived from their decomposition. It has been suggested that the wearing properties of an asphalt floor could be improved by incorporation of granite chippings. The firms who specialise in asphalt roofing and flooring would probably be able to supply a material suitable for the conditions of temperature likely to be experienced.

A tiled floor is liable to the disadvantage that, whereas the tiles themselves would be immune from ill effects due to the action of hot fat or organic acids, yet the jointing mortar is likely to be affected. If the additional weight of the floor would not be objectionable, it would be possible to obtain a resistant, hard-wearing floor by the use of paving brick with the joints grouted in with bitumen.

Magnesium oxychloride flooring would have very little advantage over a Portland cement concrete surface. Organic acids, produced by the decomposition of the fats, would attack magnesium oxide quite as readily as they attack lime, and would therefore cause similar disintegration.

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NEW CINEMAS

Normanton.—Messrs. T. Jenkinson & Sons (Doncaster), Ltd., Bentley-road, Doncaster, have obtained a £8,048 contract for erecting the "Majestic" cinema at Normanton, to seat 900. The architects are Messrs. Fred Mitchell & Sons, 9, Upper Fountaine-street, Albion-street, Leeds. The electrical contract, at £550, has gone to Messrs. F. H. Sowden, Ltd., 12, Alpha-street, Dewsbury-road, Leeds.

Purley.—It is understood that a company, Westminster Cinemas, Ltd., of Cricklewood, are concerned with a scheme to erect a 2,000-capacity cinema, with dance-hall and café, in Purley.

Waterloo.—A 2,000 capacity cinema is planned for a site in Crosby-road. The architect is Mr. L. A. G. Prichard, A.R.I.B.A., 57, Moorfields, Liverpool.

TRIBUNAL OF APPEAL.

We gave in our last issue a report of the appeal held recently in connection with the height of the new Claridge's Hotel extension.

In giving judgment, the Chairman said the Tribunal were of opinion that the special circumstances did not justify a departure from the standard maximum laid down by the Act of 1894 and repeated by the Act of 1930, and they allowed the appeal with costs against the respondents, the new Claridge's Hotel, Ltd.

The appeal being to the Tribunal either against the grant or the refusal of consent, there was nothing in either of the Acts, 1894 and 1930, so far as the Tribunal was aware, indicating what principles were to guide the council in granting or refusing their consent. It appeared to the Tribunal that where an Act of Parliament provided that a certain thing should not be done without the consent of the local authority, that must be read as meaning that thing should not be done unless in the exercise of their discretion the local authority considered that special circumstances existed which rendered the thing desirable or at any rate not undesirable.

Proposed New Baths, Peterborough.

Peterborough Town Council have agreed to purchase a site at the rear of the Old Infirmary as a site for swimming baths. They have not, however, adopted a building scheme, as the one drafted by the City Engineer, and estimated to cost £40,000, was considered much too expensive. The Engineer is to prepare a modified scheme.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Accrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aldershot	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Alfreton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Alnwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Altrincham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ashford (Kent)	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ashington	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ashton-under-Lyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aylsham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barnstaple	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barrow-in-Furness	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Birmingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bishop Auckland	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Blackburn	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Blackpool	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bognor Regis	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bolton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bradford-on-Avon	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Braintree	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bridlington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bromsgrove	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bromyard	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Bungay	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Burnley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Buxton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Cardiff	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Carlisle	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chatham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chesterfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chorley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cirencester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Clacton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cranbrook	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Darlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Deal	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Denbigh	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Derby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Devizes	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Dewsbury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Doncaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dorchester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Dorking	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Dovercourt	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Driffield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Droitwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ely	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Exmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Fakenham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Felixstowe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Frome	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Glossop	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Gosport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Grimsby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Guildford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Halifax	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harpenden	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Harrogate	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hartlepools	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hatfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hednesford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Herne Bay	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Huddersfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hull	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hunstanton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Huntingdon	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Isle of Wight	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
King's Lynn	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leicester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leighton Buzzard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Littlehampton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Liverpool	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Llandudno	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Llanelly	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
London:								
12 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
12-15 m. radius	1/8	1/8	1/8	1/8*	1/8	1/8	1/7	1/3
Loughborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Lowestoft	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Macclesfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Maidstone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Malvern	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Mansfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Margate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Market Harb'rough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Matlock	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Melton Constable	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Melton Mowbray	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Merthyr Tydfil	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Middlesbrough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newark	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newcastle-on-Tyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newcastle-ur-Lyme	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
New Forest	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Nottingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Nuneaton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Paignton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Pontypridd	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ramsgate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Redcar	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Redditch	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Reigate	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Retford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ripon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Rochester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Saffron Walden	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sawbridgeworth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Saxmundham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Scarborough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Sevenoaks	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sheffield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
South Shields	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stevenage	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stockport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stockton-on-Tees	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stoke-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stowmarket	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Stratford-on-Avon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sunderland	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swaffham	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Swansea	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Tamworth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Thetford	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Totnes	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Trowbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Uttoxeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wakefield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsden	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warminster	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Warrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wells (Norfolk)	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Weston-sup-Mare	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Weymouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Whitby	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wigan	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wisbech	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wolverhampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Woodbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Worthing	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wrexham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wycombe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wymondham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
York	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour.

For Building Trade wages in Scotland, see page 1064.

NEW BUILDINGS IN LONDON.

Cricklewood.—Offices. — Messrs. W. H. Gaze and Sons, Ltd., High-street, Kingston-on-Thames, have secured the contract for a block of offices in Claremont-road for the Express Dairy Co., Ltd., 28, Tavistock-place, W.C.1. Plans by Mr. F. J. Potter, F.R.I.B.A., 24, John-street, W.C.1.

Croydon.—Alterations.—Messrs. Grace and Marsh, New Bridge Works, Waddon, have secured the contract for alterations and additions to 212, Lower Addiscombe-road, for Lloyds Bank, Ltd. Plans by the bank architect's department, 72, Lombard-street, E.C.

Ealing.—Estate.—Messrs. R. Lancaster and Son, Ltd., Wembley, are developing the Priory Park estate by the erection of 276 houses with five roads. The architect is Mr. West, of Ealing, and the agents for the property Messrs. Clifford and Clifford, 225, Northolt-road, Harrow.

Edgware-road.—Premises.—The L.C.C. has approved plans for the erection of buildings upon a site abutting upon Cambridge-terrace, Edgware-road, and Star-street, Paddington. Messrs. Marshall & Tweedy, of 24, Margaret-street, W.1, are the architects.

Fenchurch-street.—Rebuilding. — Messrs. Williams and Cox, 34, Henrietta-street, W.C.2, have prepared plans for the rebuilding of 31 and 34, as a block of offices.

Finchley-road.—Flats.—Messrs. A. and D. Ospalak, L.R.I.B.A., 25, Victoria-street, S.W.1, have prepared plans for the erection of another large block of mansion flats to be known as "Bracknell-court."

Gray's Inn-road.—Premises.—Plans have been prepared for business premises on the site of Nos. 300-302. The surveyors concerned are Messrs. Waite and Waite, 15, Great Castle-street, W.1.

Hackney.—Additions.—The L.C.C. are to spend £2,496 for new classrooms and dressing accommodation at Hackney Marsh.

Hackney.—Baths.—The Borough Council are inviting tenders for the erection and completion of new branch baths at Shacklewell-lane. Mr. Percival Holt, M.Inst.C.E., Borough Engineer and Surveyor, prepared the plans.

Hackney.—Shops.—Messrs. S. H. Staples and W. Morley & Son have made an application to the B.C. for lock-up shops and garages abutting on the southern side of Ridley-road, between 202 and 216 and adjoining 85, Dalston-lane.

Hackney. — Bank. — The Midland Bank, Ltd., are to open a new branch at 95, Lower Clapton-road. Plans have been prepared by Messrs. Elcock & Sutcliffe, FF.R.I.B.A., of Adam House, Strand, W.C., and the alterations have been entrusted with Messrs. Hall, Beddall & Co., Ltd., of Pitfield Wharf, Waterloo Bridge, S.E.1.

Isleworth.—Alterations.—Messrs. A. and B. Hanson, Ltd., 44, Featherstone-road, Southall, have secured the contract for alterations at the "Railway Inn." The architects are Messrs. F. J. Fisher and Son, 35, John-street, W.C.1.

Lower Thames-street.—Bridge. — Messrs. J. C. Mellias and Co., 16, St. Helen's-place, E.C.3, have prepared plans for a bridge over the public way by Brewer's Quay, E.C., for Navigation Properties Co., Ltd.

Kensington. — Building.—Equity Trust (Kensington), Ltd., Regent House, 80, Kingsway, W.C.2, are to acquire a site bounded by High-street, Campden Hill-road, Argyll-road and Phillimore-mews. A block of business premises is to be erected. Plans by Messrs. Trehearne and Norman, Preston and Co., 83, Kingsway, W.C.2.

Kensington.—Flats.—Plans are being prepared for a block of flats in Kensington High-street. The architects are Messrs. Alfred and David Ospalak, 25, Victoria-street, S.W.1.

Kilburn.—Additions.—Messrs. G. Godson & Sons, Ltd., of Kilburn-lane, are builders for additions to the Maria Grey Training College and Brondesbury and Kilburn High School for Girls for the Middlesex C.C. The estimated cost is £19,135, and the County Architect is Mr. W. T. Curtis, F.R.I.B.A., 10, Gt. George-street, S.W.1.

Marble Arch.—Hotel.—Work is proceeding on the excavations for the new hotel which will occupy a site of 56,000 square feet at Marble Arch. This hotel will be owned jointly by Messrs. J. Lyons & Co., Ltd., and the Strand Hotel, Ltd. The steel frame is being manufactured and erected by Dorman, Long & Co., Ltd. The hotel will contain 900 bedrooms, and will cost 1½ million pounds sterling. The architect is Mr. F. J. Wills, F.R.I.B.A., and the engineers are Messrs. Reade, Jackson & Parry. The contractors for foundations are Messrs. Holloway Bros.

North Sheen.—Building.—The Fulham B.C. has accepted the tender of Messrs. C. H. Gibson, Ltd., 509, London-road, Croydon, for the erection of a chapel, shelter and conveniences at the North Sheen Cemetery. The designs are by the Borough Surveyor, and the accepted estimate is £5,238.

Southgate. — Additions. — For alterations and additions to the Minchenden secondary school, the Middlesex C.C. has recommended the estimate of £30,160 of Messrs. Albert Monk, of Lower Edmonton, N. The County Architect is Mr. W. T. Curtis, F.R.I.B.A., of 10, Great George-street, S.W.1.

South Kensington.—Flats.—Messrs. John Knox and Dyke, Ltd., 4, Cavendish-place, W.1, are the contractors for a large block of flats on the site of 1-6, Onslow-houses and No. 2, Pelham-street. Mr. R. M. Pigott, F.R.I.B.A., 44, Bedford-road, W.C.1, is the architect.

Stoke Newington.—Building.—Mr. A. E. Batzer, architect, 36, Ebury-street, S.W.1, has applied to the Hackney B.C. for consent to the erection of a building at the rear of 154-156, High-street, Stoke Newington, to abut upon Lawrence Buildings.

St. Pancras.—Flats.—The St. Pancras House Improvement Society have placed a contract with Messrs. Wheeler Bros., 120, Church-street, W.8, for a block of flats in Bridgewater-street. The scheme is estimated to cost £100,000. Mr. Ian B. M. Hamilton, F.R.I.B.A., 16, Old-buildings, Lincoln's Inn, W.C.2, architect.

Tooting.—Adaptation.—Messrs. Mullen & Lumsden, Ltd., 41, Eagle-street, W.C.1, are carrying out, at £4,353, adaptation work at Tooting Graveney Council school.

Tottenham.—Additions.—For alterations and additions at Stamford Hill School, the U.D.C. are inviting tenders. Captain H. F. Wilkinson is the surveyor to the E.C.

Tottenham.—Hall.—A new Wesleyan hall is to be erected on the L.C.C. estate at White Hart-lane. The contract has been let to Messrs. Ekins and Co., Ltd., Great Northern Works, Hereford. Messrs. Smee and Houchin, 22, Essex-street, W.C.2, are the architects. The scheme is estimated to cost £8,000.

Wembley.—Track —Messrs. Walter Scott and Middleton, Ltd., 28, Victoria-street, S.W.1, have secured the contract for a new track from Wembley Park station to Stanmore for the Metropolitan Railway Co. The estimated cost is £170,000. Plans prepared under the direction of Mr. E. A. Wilson, Baker-street, N.W.1.

Wembley.—Houses.—Messrs. Comben and Wakeling, Ltd., of Court-bar, Watford-road, Wembley, are building 62 houses in Spencer-road, Norval-road, and Nathan-road.

Willesden. — Building. — The Willesden Education Committee are inviting tenders for the erection of four additional rooms at Wesley-road Council School, Stonebridge. Mr. F. Wilkinson is the council's engineer.

Wood Green.—Building.—H.M.O.W. are inviting estimates for a new employment exchange.

Wood Green.—Premises.—Messrs. Huggins and Co., brewers, 40, Palace-street, S.W.1, propose erecting a new public-house in Lordship-lane, N.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or where quantities, forms of tender etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

DECEMBER 22.

Aylesbury. — Re-building. — Of existing wall at cemetery entrance, Tring-rd., for T.C. Wm. Harold Taylor, B.E. and S.

Barrow-in-Furness.—Wall.—New brick boundary wall at Blake-st. playing field, for Corporation. B.E.

Beddington and Wallington. — Glasshouse.—Heated glasshouse, 30 ft. by 10 ft., at Mellows Park, Wallington, for U.D.C. S. F. R. Carter, E. and S.

Beeston.—Houses.—28 parlour and non-parlour on Wollaton-rd., Dennis-av. and Anderson-crescent, near Beeston Cemetery, for U.D.C. E. A. Bush, S. Dep. £2 2s.

Belfast.—Convenience.—Underground public sanitary convenience in Shaftesbury-sq., for C.B. R. B. Donald, City S. Dep. £2 2s.

Bristol.—Home.—Nurses' Home for Mental Hospital at Fishponds, for T.C. Bernard and Son, quantity surveyors, 26, Orchard-st. Dep. £5 5s.

Doncaster. — Building. — 2 pavilions, workshop, alterations to hall, stables and cottages. South West Yorkshire Joint Board for Mentally Defective, St. Catherines, Doncaster. C. L. des Forges, clerk. Municipal Offices, Rotherham. Dep. £2 2s.

Forehoe.—Houses.—6 pairs at Costessey, for R.D.C. L. Standley, clerk. Dep. £1.

Glasgow.—Extensions.—To High School of Glasgow, Elmbank-st., for E.C. D. Stenhouse, T.C. Dep. £1 1s.

Glasgow.—Installation.—Of electric lighting at Torbreck-st. housing scheme (extension), for T.C. D. Stenhouse, T.C.

Glasgow.—Ironmongery.—To be executed at Ruchill school, Leighton-st., Ruchill, for T.C. D. Stenhouse, T.C. Dep. £1 1s.

Hastings.—Houses.—110 on Hollington site No. 2, for C.B. B.E., 37, Wellington-sq. Dep. £2 2s.

Hull.—Demolition.—Pulling down of shop and buildings at 52 and 53, Prospect-st., for T.C. A. R. Hills, Deputy City Engineer.

Ilford. — Telephone Exchange. — For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Liverpool.—Houses.—On the Dovecot estate, for the Corporation. Town Clerk, Municipal-buildings. Dep. £1 1s.

London.—Wiring.—Also fittings for electric lighting in 39 blocks of tenement dwellings, etc., at Leigham Court-rd. housing site, Streatham Hill, for L.C.C. Chief Engineer, Old County Hall, Spring Gardens, S.W.1. Dep. £1.

London.—Repairs and Painting, etc.—To various hospitals, for L.C.C. Chief Engineer, Old County Hall, Spring-gardens, S.W.1. Dep. £1.

London.—St. Peter's (Whitechapel) Hospital, E.1, external painting, etc.; St. Mary (Islington) Hospital, N.19, remaking of and repairs to roads; Archway Hospital, N.19, repairs to roads; St. Pancras Instn. and Hospital, N.W., repairs to and spraying of roads; St. John's Hospital, S.W.18, repairs to roads and paths; South Wharf, Rotherhithe, S.E.16, external and internal cleansing, painting, etc., for the L.C.C. The Clerk, County Hall, Westminster Bridge, S.E.1. Dep. £1 in each case.

Ryton.—Houses.—50, at Crookhill and Crawcrook, for U.D.C. Newcombe & Newcombe, architects, 25, Eldon-sq., Newcastle. Dep. £2.

Slinfold.—Repairs.—To interior of church roof and interior decoration. H. Milburn Pett, A.R.I.B.A., 5, Marlborough-place, Brighton.

Teddington. — Additions. — For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Thurcroft.—Additions.—H. R. Atkinson, 25, Steadfolds-lane, Thurcroft.

Witham.—Bungalows.—12 semi-detached bungalows and two concrete roads on Cocks Farm estate, for U.D.C. G. Ogden, S. Dep. £3 3s.

DECEMBER 23.

Glasgow.—Houses.—32 houses and 12 shops at Carntyne, for T.C. D. Stenhouse, T.C.

Limavady.—School.—Public elementary school at Lower Cumber, for Londonderry and Limavady Regional E.C. W. D. Cousins, principal executive officer, Education Office, Limavady.

Wood Green. — Employment Exchange. — For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

DECEMBER 24.

***Salisbury.** — Alterations. — And additions, to Fisherton Anger Council school. Bothams & Brown, 32, Chipper-lane. Dep. £2 2s.

***Rugby.**—School.—A. C. Bunch, County Architect' 27, Binswood-av., Leamington Spa. Dep. £2 2s.

DECEMBER 25.

Burntisland.—Houses.—32 of two and three apartments at Rossend, for T.C. J. A. Waddell, B.S.

DECEMBER 27.

Tadcaster.—Housing.—20 houses on Sherburn estate, for R.D.C. H. W. Boardman, S. Dep. £2 2s.

DECEMBER 29.

Bingley.—Installation.—Low pressure hot water at Grammar school, for West Riding E.C. Education Officer, County Hall, Wakefield.

Doncaster.—Sewers.—Sewers and surface water drains and construction of roads in connection with the erection of 292 houses on Intake estate, for C.B. R. E. Ford, Housing Surveyor, 3, Priory-place. Dep. £2.

Hemsworth.—Installation.—Extension of electric lighting at Hemsworth Secondary school, for West Riding E.C. Education Officer, County Hall, Wakefield.

Hereford.—Market.—2 new sale rings, complete with rostrums, at Cattle Market, for T.C. City E.

Richmond (Surrey).—Chambers.—Chamber to accommodate 2 electrically-driven centrifugal pumps at their river water intake in Petersham Meadow, and for a chamber to accommodate 1 electrically-driven centrifugal pump at Deep Well in Terrace-gardens, for T.C. H. P. Williamson, E., Hotham House, Heron-court, Richmond. Dep. £2.

Scarborough.—Alterations.—To Floral Hall, for T.C. H. W. Smith, B.E.

Southport.—Clinic.—Maternity hospital and clinic in the Southport Infirmary grounds, Curzon-rd., for Miss C. Hartley, 11, Oxford-rd., Birkdale. A. E. Jackson, B.E. Dep. £2 2s.

Southport.—Market.—New market in King-st. and Market-st., for C.B. H. Langman, F.R.I.B.A., architect, Westminster-bigs., 106, Lord-st., Southport. Dep. £2.

DECEMBER 30.

Blackheath, Birmingham.—Telephone Exchange. —For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Ealing.—Building.—Transformer sub-station at Longfield-av., Ealing, W.5, for T.C. Borough Electrical Engineer. Dep. £1 1s.

Hanley.—Shed.—Shed, garages and workshops at Hanley, for Staffordshire Potteries Water Board. R. C. Frain, E., Albion-st., Hanley, Stoke-on-Trent. Dep. £2.

Lampeter.—Offices.—Chapel vestry and offices for Trustees of Zoar Congregational Church, Lampeter. T. Jay Evans & Son, F.A.R.I.B.A., 120/122, Victoria-st., London, S.W.1. Dep. 10s.

DECEMBER 31.

Aldingbourne, Hunston and New Fishbourne.—Houses.—Erection of, in the above named parishes, for the Westhampnett R.D.C. The Clerk, Council Offices, Pallant House, Chichester.

Amersham.—Houses.—Chalfont St. Peter housing scheme (Glebe site), third portion; 40 houses, drainage, paths, fences and gates, and estate roads and paths; Chalfont St. Giles' housing scheme (Narcott-lane site), second portion; 16 houses and estate roads and paths, for R.D.C. Burgess, Holden & Watson, architects, Beaconsfield. Dep. £2 2s.

Bedford.—Cottages.—12 non-parlour type at Goldington, and for 8 non-parlour type at Wymington, for R.D.C. F. R. Chapman, S. Dep. £2 2s. each.

Coundon.—School.—To accommodate 816 scholars, for Durham C.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

Kegworth.—Houses.—For the Castle Donington R.D.C. The Clerk, Council Offices. Dep. £3 3s.

Ryhope.—School.—For Durham County E.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

Shoreham, Kent.—Telephone Exchange.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Stonebridge, N.W.—Additions.—To Wesley-rd. Council school, for the Willesden D.C. Director of Education, Education Office, Dyne-rd., Kilburn, N.W.6. Dep. £1 1s.

Tuttbury.—Houses.—Six pairs in Clay's-lane, Branston, for R.D.C. R. S. Litherland, L.R.I.B.A., 13, High-st., Burton-on-Trent. Dep. £1 1s.

West Riding.—Eaves.—Provision of cast-iron eaves gutters and rainwater pipes, at Penistone Poor Law Institution; eaves gutters at Grenoside Poor Law Institution; external painting at Grenoside Poor Law Institution; bathroom at Giggleswick Poor Law Institution; installation of hot water apparatus at Giggleswick Poor Law Institution; erection of boiler house at Giggleswick Poor Law Institution; erection of 2 fire escapes at Giggleswick Poor Law Institution; paving to main yard at Giggleswick Poor Law Institution, for C.C. P. O. Platts, A.R.I.B.A., West Riding Architect, County Hall, Wakefield

JANUARY 2.

Kingsley and Newton.—New Council school.—For the Chester E.C. County Architect, Newgate-st., Chester. Dep. £2 2s.

JANUARY 3.

Edinburgh.—Houses.—84 three-apartment houses at Niddrie Mains housing scheme, for T.C. E. J. MacRae, A.R.I.B.A., City Architect.

Enniskillen.—Houses.—Ten houses, three in Mary-st. and seven in Strand-st., for U.D.C. B.S. Dep. £2 2s.

JANUARY 5.

Caerphilly.—Erection.—Of public convenience, omnibus shelter, cloak room and site improvements, Cardiff-rd., for U.D.C. T. H. Richards, S. Dep. £2 2s.

Fareham.—Houses.—12 on housing site, Gordon-rd., for U.D.C. H. T. Privett, S.

***Cranham.**—Houses.—For the Romford R.D.C. Clerk, 16a, South-st., Romford. Dep. £2 2s.

Hastings.—Extensions.—Of Johns-place, Cambridge-rd., for E.C. B.E., 37, Wellington-sq. Dep. £2 2s

Hastings. — Extension. — To Hollington Council school, Battle-rd., for E.C. B.E., 37, Wellington sq. Dep. £2 2s.

Hornsea. — Lavatories. — Public lavatories and shelter at Hall Garth-pk., for U.D.C. S.

Hucknall.—Houses.—24, on Storth Meadow estate, for U.D.C. H. M. Aitchison, architect and surveyor. Dep. £2 2s.

Leigh, Lancs.—Two Schools.—Erection of, in Manchester-rd. and Westleigh-lane. Town Clerk, Town Hall. Dep. £2 2s.

JANUARY 6.

Clutton.—Cottages.—4 non-parlour at Litton, for R.D.C. Thomas & Morgan & Partners, architects, 23, Gelliwastad-rd., Pontypridd. Dep. £2 2s.

JANUARY 7.

Bangor Teifi.—Rebuilding.—St. David's Church, Bangor Teifi, near Llandyssul. D. Davies & Son, architects, Penrhiwllan, Henllan.

Brighton.—Houses.—On the Rottingdean and Whitehawk housing sites, for the Corporation. Town Clerk, Town Hall. Dep. £2 2s.

***Datchet.**—Pump House.—Erection of, for the Slough U.D.C. Engineer & Surveyor, Council Offices, William-st., Slough.

JANUARY 9.

***Belfast.**—Lodges and Gate Piers.—At the new Parliament Building, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

JANUARY 10.

Caerphilly. — Houses. — 20 non-parlour, at The Grange, and 30 non-parlour type at Pwllypant, Llanbradach, and construction of roads and sewers in connection therewith, for U.D.C. B. Jenkins, Housing Officer. Dep. £2 2s.

Rainford.—Houses.—12 working-class dwellings off Ormskirk-rd., for U.D.C. S. Dep. £2 2s.

JANUARY 12.

Smethwick.—Heating, etc.—For Bearwood Baths, for C.B. R. Fletcher, B.E. Dep. £5.

JANUARY 13.

***Newcastle-on-Tyne.**—Reconstruction of Roof.—At the County Court, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

JANUARY 14.

Chichester. — Bungalow. — Bungalow residence Hospital.—Erection of at the Graylingwell Mental Hospital. Clerk, 9, West Pallant. Dep. £5 5s.

***Headington, Oxford.** — Sorting Office. — For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1 Dep. £1 1s..

London, E.—Baths.—Erection and completion of branch baths at Shacklewell-lane, for the Hackney Borough Council. The Chairman, Town Hall, Mare-st., Hackney, E.8. Dep. £3 3s.

JANUARY 15.

***Mount Pleasant, E.C.**—Extension of Sub-Station, etc.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

JANUARY 16.

***Midhurst.** — Post Office. — Erection of, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

JANUARY 19.

North-East England.—Foundations.—Site works, foundation works and buildings in area of North-East England electricity scheme, for Central Electricity Board. R. H. Fox, secretary, Trafalgar-buildings, 1, Charing Cross, W.C.2. Dep. £2 2s.

Wark-on-Tyne.—Wall.—Stone wall to churchyard extension, for S. Michael's Church Council. Rector, Wark-on-Tyne.

Warwick.—Alterations.—And additions to the County offices. A. C. Bunch, County Architect, 27, Binswood Avenue, Leamington. Dep. £2 2s.

JANUARY 23.

Tottenham, N.15.—Alterations and Additions.—At Stamford-hill school, for the Tottenham E.C. Clerk, Education Offices, Philip-lane, S. Tottenham. Dep. £2.

NO DATE.

Durer. — Repair. — To church and manse, for Minister and Kirk Session of Duror Parish Church. Rev. A. McFadyen.

Leckhampton. — Classrooms. — For Leckhampton schools. L. W. Barnard & Partners, architects, 47, Promenade. Dep. £1 1s.

Merioneth.—Alterations.—To Upper Corris Council school, for E.C. A. M. Howard-Jones, L.R.I.B.A., County Offices, Dolgelley.

St. Helens.—Demolition.—Of "Fleece Hotel," Church-st. Biram & Fletcher, FF.R.I.B.A., 17, George-st.

Sutton.—Alterations.—Alterations to boundary walls, etc., at Askern-rd., Sutton, Council school, for West Riding C.C. C. Harris, Education Offices, Knottingley.

Welshpool. — Offices.—County offices, Welshpool. Architect's Office, 612, Royal Liver-bldg., Liverpool. Dep. £1 1s.

Wickiewood.—Painting.—Cleaning, painting, and repairs at Poor Law Institution and King's Lynn Institution, for Norfolk C.C. C. J. Norton, A.R.I.B.A., County Surveyor's Department, 9, Queen-st., Norwich.

MATERIALS, etc.

DECEMBER 22.

Hereford.—Road materials.—For T.C. City E.

DECEMBER 29.

Isle of Wight.—Bitumen Compounds.—For C.C. A. J. A. Harris, County Highways Surveyor, County Hall, Newport, I.W.

DECEMBER 30.

Northumberland.—Road Materials.—For C.C. A Cheyne, C.S.

DECEMBER 31.

Lancashire.—Tar.—160,000 gallons of tar for tar-spraying, for C.C. P. Schofield, C.S., Preston.

London.—Tar.—Tar, etc., and tar-spraying of roads, for Lambeth B.C. O. Cattlin, B.S.

Montgomery.—Broken Granite.—For C.C. Wm. Owen Jones, C.S., County Offices, Berriew-st., Welshpool.

Rhondda. — Road Materials. — For U.D.C. E. Taylor, E. and S.

JANUARY 1.

Norfolk.—Road Materials.—For C.C. S. H. Warren, C.S., 9, Queen-st., Norwich.

JANUARY 3.

West Riding.—Road Materials.—West Riding Surveyor, County Hall, Wakefield.

JANUARY 5.

Middleton.—Road Materials.—For T.C. B.E.

JANUARY 8.

Leeds.—Road Materials.—For Highway Dept. E. W. Cockerlyne, Highways Engineer, 155, Kirkstall-rd.

JANUARY 10.

Bexley.—Highway Materials.—For U.D.C. G. A. Joy, S.

Blackburn.—Road Materials.—For C.B. H. M. Webb, Borough and Water Engineer.

JANUARY 12.

Lindsey (Lincs).—Highways Materials.—For C.C. A. G. Bradshaw, C.S., Newland, Lincoln.

JANUARY 16.

London. — Bricks, etc. — For Islington B.C. Electrical Engineer, Electricity Works, 60, Edengrove, Holloway, N.7.

Grips TIGHT to metal or brick..

For all repairs to metal or brick subjected to heat, use Purimachos Plastic Fire Cement, tested and proved for nearly fifty years. Never crumbles nor contracts. Ensures firm gas and smoke-tight joints.

Obtainable in tins and drums from Builders' Merchants and Ironmongers.

FOR ALL REPAIRS SUBJECTED TO HEAT USE

PURIMACHOS LTD., 165, ST. PHILIP'S, BRISTOL.

Purimachos
Plastic Fire Cement Regd.

JANUARY 19.

London.—Building Materials.—For Camberwell B.C. W. Bell, B.E. and S.

JANUARY 21.

Southend-on-Sea.—Building Materials.—For C.B. Borough Electrical Engineer and Manager, Electricity Works, London-rd.

ENGINEERING, IRON AND STEEL.

DECEMBER 22.

Midlothian.—Culvert.—Reinforced concrete culvert at Hall's bridge and the widening of Ann's Mill bridge in concrete on Edinburgh-Peebles-rd., near Leadburn, for C.C. Blyth & Blyth, civil engineers, 136, George-st., Edinburgh. Dep. £10.

DECEMBER 23.

Dublin.—Steelwork.—290 tons of steelwork for bridges, consisting chiefly of plate girders, pressed troughing, broad flange beams and British Standard beams, for Gt. Southern Rly. A. W. Bretland, Chief Engineer, Westland-row Station, Dublin, C.S. Charge £1 1s

Skipton.—Sewerage.—Additional percolating filter and humus tanks, for Gluaburn sewerage, for R.D.C. A. Rodwell, E., 16, Gargrave-rd. Dep. £1 1s.

Southend-on-Sea.—Rails.—100 tons of "Sandberg" steel tramway rails, for C.B. R. H. Dyer, B.E. and S. Dep. £1 1s.

DECEMBER 24.

Wemyss.—Pipes.—Cutting trenches for, and laying about 3¼ miles of 15-in. dia. cast-iron pipes, including construction of incidental and relative works from Coul reservoir to Carriston, for District Water Trustees. Crouch & Hogg, chartered civil engineers, 17 Lynedoch-st., Glasgow, C.3. Dep. £1 1s.

DECEMBER 27.

Abington.—Building—Pumping station, sump chamber, duplicated pumping installation, 4-in. and 3-in. cast-iron mains, sluice valves, hydrants and other works for supplying parishes of Sutton Courtenay, Drayton, Sutton Wick, Steventon and Milton, for R.D.C. Guthrie Allsebrook, E., 29, Crown-st., Reading. Dep. £3 3s.

Thirsk.—Waterworks.—Covered reinforced concrete service tank, impounding chamber, pipe line and other appurtenant works in parish of Knayton, for R.D.C. W. L. I'Anson-Robson, E., Carlton Miniott, near Thirsk.

DECEMBER 29.

Addingham.—Repairs.—To Addingham suspension bridge, which carries public footpath over River Wharf, near Addingham, Skipton, for West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Dep. £1.

Mayhole.—Water Supply.—Supplying and laying 9-in. bitumen-lined steel pipe, to form a new water main about 3 miles in length; constructing an additional sand filter; raising concrete wall of reservoir, and other associated work, for T.C. Gilbert Thomson & Son, chartered civil engineers, 164, Bath-st., Glasgow, C.2. Dep. £2 2s.

Warrington.—Sewer.—Concrete egg-shaped relief sewer, total length about 600 yds., dimensions 54 in. by 81 in. and 62 in. by 93 in., together with storm overflow chamber, manholes, river outlet and other appurtenant works, for C.B. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £5.

DECEMBER 30.

Glaisdale.—Reconstruction.—Of Glaisdale bridge over River Esk in North Riding of Yorkshire, for Surrey C.C. County Engineer, County Hall, Kingston-on-Thames. Dep. £2 2s.

Southgate. — Improvements. — Widening and making-up of Chequers-way, construction of about 260 yds. of 9-in. dia. concrete pipe surface water sewer, with manholes, and erection of reinforced concrete bridge spanning Pymmes Brook, for U.D.C. R. Phillips, S. Dep. £2.

DECEMBER 31.

Bridgwater.—Widening.—In reinforced concrete, and contingent works, Victoria-rd. bridge, for T.C. R. A. Watson, B.E. Dep. £2 2s.

Exmouth.—Pool.—Open-air swimming pool, etc., adjacent to Esplanade, for U.D.C. S. Hutton, E. Dep. £7 7s.

Newquay.—Wall.—20 lin. yds. of sea wall, 23 ft. high, together with retaining and face walls, approximately 50 ft. in height, with all excavation, filling and other works incidental thereto, at Towan Beach, adjoining South Quay-hill, for U.D.C. C. W. Walters, E. and S. Dep. £5.

St. Austell.—Sewerage.—4,800 yds. of 6-in., 7-in. and 8-in. stoneware pipe sewers, with manholes, settlement tank, percolating filter, and incidental works, at Penwithick, for R.D.C. Lemon and Blizard, consulting engineers, 24, Lockyer-st., Plymouth. Dep. £3 3s.

JANUARY 1.

Axbridge.—Water Supply.—For North Marsh parish, for R.D.C. Parker Pearson & Ross Hooper, engineers, Dallas-chams., Chippenham. Dep. £5.

Egypt.—Installation.—Of water works at Achmoun, for Egyptian Ministry of Interior. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X.10,518.)

Exeter.—Resewering 5,430 yds. of sewers and surface water drains, of diameters ranging from 6 in. to 33 in., in stoneware and concrete pipes, the provision of manholes, and the construction of screening chamber, pump well and pit and pump house, in parish of St. Thomas, for T.C. R. H. Dymond, City E. and S., 7, Southernhay West. Dep. £3.

JANUARY 7.

Chertsey.—Sewerage.—Laying of approximately 2,378 ft. 7 in. dia. stoneware pipes, 1,921 ft. of 9 in. dia. stoneware pipes, 1,745 ft. 6 in. C.I. rising main, 2,740 ft. 3 in. C.I. air pressure main, with valves, etc.; also No. 16 manhole shafts, dual ejector station complete, and provision for lateral connection of certain properties to the new sewers, together with other appurtenant works, for R.D.C. H. Beeney (Capt.), E. and S.

JANUARY 8.

Nottingham.—Bridge.—Over L.M. & S. Rly., Mansfield branch, on new-rd., Ratford-rd., to Nuthall-rd., for T.C. T. Wallis Gordon, City E. and S. Dep. £2.

Nottingham.—Steelwork.—102 tons of steelwork in plate girders, stanchions, cross bracing floor ties, bearing plates, etc., for bridge over L.M. & S. Rly., Mansfield Branch on new rd., Radford-rd., for T.C. T. Wallis Gordon, City E. and S. Dep. £2.

JANUARY 9.

Sandwich.—Main.—1,085 yds. of 9-in., 12-in. and 15-in. sewers, 789 yds. of 7-in. and 12-in. cast-iron rising main, 2 pumping stations, pumps, etc., for T.C. Silcock & Simpson, 25, Victoria-st., Westminster, S.W.1.

Shardlow.—Sewerage.—Sewerage works at Sandiacre, for R.D.C. Elliott & Brown, chartered civil engineers, Burton-buildings, Parliament-st., Nottingham. Dep. £3 3s.

JANUARY 14.

Newcastle-upon-Tyne. — Piping. — Piping equipment for power station, including high-pressure steam piping, boiler feed water piping, all water service piping and auxiliaries and fittings, at Company's power station, Dunston-on-Tyne, for Electric Supply Co., Ltd. C. Skipsey, joint secretary, Carliol House, Newcastle-upon-Tyne. Dep. £2 2s.

ROAD, SEWERAGE, AND WATER WORKS.

DECEMBER 22.

Belfast.—Street.—Completion of back street between Ogilvie-st. and Tildarg-st.; back street west side of Rosebery-rd. (south of Imperial-drive); and back street between Lismain-st and Ravenhill-parade, for C.B. City S.

Bridlington.—Sewer.—New concrete road, No. 6, and sewer on Priory Butt Hill estate. E. Vincent-King, A.R.I.B.A., architect and civil engineer, 30, St. James's-rd., Bridlington. Dep. £3 3s.

Chatham.—Track Work.—(1) Removal of tramway tracks, etc., and supplying wood paving on concrete foundation, High-st., Chatham (A.2); (2) removal of tramway tracks, etc., and the construction of concrete carriageway at The Brook, Chatham; and (3) removal of tramway tracks, etc., and reinstating carriageway at Dock-rd., Chatham, for T.C. B.S.'s Office, Town Hall, Chatham. Dep. £2 2s.

Chingford, E.4.—Reinforced concrete work, for the U.D.C. Clerk, Town Hall, The Ridgeway. Dep. £2 2s.

Esher and The Dittons.—Sewer.—Laying of 440 yds. run of 12-in. and about 670 yds. run of 9-in. cast-iron pipe sewer at Arbrook Common and Copsem-lane, for U.D.C. S.

Hereford.—Roadworks.—For T.C. City Engineer. Town Hall, Hereford.

Huddersfield. — Fittings. — Water-closet fittings, common bricks, lead water pipe, earthenware sanitary goods, manhole stones and stone covers, iron manhole plates, and other materials required for conversion scheme, for C.B. W.C. Conversion Officer, 18, Ramsden-st.

Merthyr Tydfil.—Surfacing.—Various streets, for C.B. B.E.

Whitstable.—Reconstruction.—Of carriageway in reinforced concrete at Church-st.-rd. (part of), Tankerton, together with supply of all materials, for U.D.C. G. Dunkin, B.Sc., Surveyor and Water Engineer. Dep. £2 2s.

Willesden.—Improvements.—Of Dollis Hill-av., for U.D.C. F. Wilkinson, E. Dep. £2 2s.

DECEMBER 23.

Failsworth.—Fencing.—Supply and fixing of wrought-iron railings and gates and supply and fixing of wood post and rail fencing and gates required in connection with widening and improvement of part of Lord-lane, for U.D.C. J. W. E. Brown, S.

Luton.—Road.—Sewering, kerbing, channelling and foundations in construction of new road between Whitecroft-rd. and Tower-rd., on Hart Hill housing site, for T.C. J. W. Tomlinson, B.E. and S. Dep. £1 1s.

Prestwich.—Making-up.—Also draining of Wilton-av., for U.D.C. H. T. Ainsworth, E. and S. Dep. £1 1s.

DECEMBER 29.

Glossop Dale.—Main.—Providing, laying and jointing complete of about 560 lin. yds. of 4-in. cast-iron water main at Charlesworth, for R.D.C. Brady and Partington, civil engineers, Chapel-en-le-Frith. Dep. £1.

Hereford. — Sewerage. — And street works on Hunderton site, for T.C. City Engineer, Town Hall. Dep. £2 2s.

Merton and Morden.—Widening.—Also improvement of Cannon Hill-lane, at north end, approximate length 136 yds., for U.D.C. G. Jerram, S. Dep. £1.

DECEMBER 30.

London.—Tar.—Coating with tar or bituminous material about 70 miles of roads in borough and at Council's Cemetery, East Finchley, N.2, for Islington B.C. B.E.

Manchester.—Drainage.—Main drainage work, Moston-lane, from 5, Rochdale-rd. to Blue Bell-av., Moston, for Corporation. City E. Dep. £5 5s.

DECEMBER 31.

Kingsbury.—Widening.—Widening and making-up section of Stag-lane between Edgware-rd. and De Haviland's works, Stag-lane Aerodrome, and surfacing with bituminous macadam, approximate length 360 yds., for U.D.C. R. C. N. Newport, E. and S. Dep. £2 2s.

Wickersley.—Asphalting.—At Council school, for West Riding C.C. A. Adcock, divisional clerk, Education Office, Godstone-rd., Rotherham.

JANUARY 1.

Long Eaton.—Making-up.—Of Breedon-st. (part of), Byron-av., Milford-av., Roosevelt-av., Lake-st., for U.D.C. H. Raven, E. and S. Dep. £2 2s.

JANUARY 2.

Aberdare.—Widening.—At Harriet-st., Trecynon, and Penyard Llwydcoed, for U.D.C. S. Dep. £2 2s.

JANUARY 3.

Dartford.—Making-up.—Of Station-rd., Longfield, and appurtenant works, for R.D.C. S. Dep. £2 2s.

JANUARY 5.

Chingford.—Road.—1,570 yds. super. of reinforced concrete roadway, together with paths, etc., at Beresford-rd., for U.D.C. S. J. Hellier, E. and S. Dep. £1 1s.

JANUARY 6.

Limerick. — Extension. — Provision, laying and jointing of about 2,000 yds. of 15-in. C.I., concrete-lined pipe, which is to be laid from Garryowen Reservoir, through private grounds, and thence through Carey's-rd. to crescent, for Corporation. Pierce F. Purcell, consulting engineer, Ashton, Killiney, Co. Dublin. Dep. £5.

Stockport.—Valley Supply.—Laying and jointing line of cast-iron pipes, 30 in. in dia., and about four miles in length, along main rd. between Whaleybridge and Disley, for Corporation. G. H. Hill and Sons (Manchester), civil engineers, 40, Kennedy-st., Manchester. Dep. £5 5s.

JANUARY 7.

Maldon.—Paving.—Also kerbing footways on west side of Market-hill from High-st. corner to Mr. Bonner's premises, and on south side of Mill-rd. from 2, Mill-rd. to Wantz-rd. corner, for T.C. B.E.

JANUARY 8.

Slough.—Roads.—Roads and sewers in connection with housing scheme No. 3, for U.D.C. A. Bromly, E.

Southend-on-Sea.—Extension.—New 60-ft. road from Kensington-rd. to Huntingdon-rd., together with necessary surface water drains and incidental works in connection thereto, for T.C. R. H Dyer, B.E and S. Dep. £2.

JANUARY 12.

Esher and Dittons.—Mains.—2,960 lin. yds. of 24-in. diameter cast-iron main, from Board's Surbiton Works, Portsmouth-rd., Surbiton, to Kingston by-pass-rd. at its junction with Hook-rd., and 2,835 lin. yds. of 18-in. dia. cast-iron main along Kingston by pass rd. to Tolworth, for M.W.B. Chief Engineer, Room 201, 173, Rosebery-av., E.C.1. Dep. £10.

JANUARY 14.

Kent.—Widening.—Also improvement of approximately 2.3 miles of a section of Maidstone-Chatham-rd. from Monckton's-lane, Maidstone, to "Lower Bell" P.H., for C.C. H. T. Chapman, C.S., St. Peter's-st., Maidstone. Dep. £10.

JANUARY 19.

London.—Repairs.—Repair and maintenance of all works of stone paving in the carriageways and footways of the City, for Corporation. City E. Dep. £2 2s.

London.—Sewer.—Reparation, maintenance and reconstruction of sewers and drains of City, for Corporation. City E. Dep. £2 2s.

NO DATE.

Maldens and Coombe.—Road.—Construction of South-lane diversion rd., for U.D.C. S. Dep. £2 2s.

Pateley Bridge.—Repair.—To asphalt playground, glass houses, Council school, Pateley Bridge. W. E. Oxley, 106, Station-parade, Harrogate.

Public Appointments

DECEMBER 22.

Carlisle.—Clerk of Works. T. B. Harston, 18, Bank-st.

Ipswich.—Two Architectural Assistants (temporary). Clerk, County Hall.

Stafford.—Clerk of Works. Architect, County Education Offices.

DECEMBER 23.

Derby.—Builder's Clerk required in Building Dept. A. Sheard, Manager, Osmaston-rd.

Northallerton.—Architectural Assistant required by North Riding of Yorks C.C. Secretary, Education Offices, County Hall.

Workington. — Architectural Assistant. Town Clerk, Town Hall.

DECEMBER 31.

***Stoke-on-Trent.** — Architectural Assistants.—A. Burton, City Engineer and Surveyor, Town Hall.

JANUARY 1.

Southall, Middlesex.—Town Planning Assistant required by the U.D.C. J. B. Thomson, Engineer and Surveyor, Town Hall.

JANUARY 3.

Tilbury.—Town Planning Assistant required by the U.D.C. Clerk, Council Offices, Civic Square.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Banbury.—B.S. prepared layout for 22 parlour type houses and 68 non-parlour type houses, for T.C.

Barnet.—M.H. held inquiry concerning £16,000 swimming bath scheme proposed by U.D.C.

Barrow.—E.C. to make application to M.H. for sanction to borrowing £35,820 for new grammar school for girls.

Birmingham.—T.C. propose to purchase land at Shirley for purpose of municipal aerodrome.—Bank Committee to purchase property in Birmingham-rd. and Church-sq., Oldbury, as site for branch bank.

Blackburn.—T.C. approved:—extension to mill, Cicely Bridge mill, Jno. Baynes, Ltd.; 14 houses, Revidge-rd., Penny Bros.; 6 houses, Frederick-row, Wm. Duckworth; proposed layout of new street (amended), off Bog Height-rd., Walter Livesey.

Bournemouth.—T.C. are to erect bungalows on sea front.

Bradford.—Hotel opposite Eccleshill Church and licensed premises to be known as the "School Green" hotel at Thornton.

Brentwood.—U.D.C. to sell to Essex C.C. Debtors' Field for central school.

Bury.—Manchester Brewery Co., Ltd., Woodside Brewery, Salford, propose reconstructing front of "Commercial" hotel, Princess-st. Plans by Fred Riley (Brameld & Smith, architects), County-bldgs., 4, Cannon-st., Manchester.

Bury.—St. James' Parish being asked to raise £1,500, and St. Mary's Parish £1,000 for church schools, due to reorganisation requirements of B. of E.

Cambridge.—T.C. approved:—addition to county offices, corner of Castle-st., Cambridgeshire C.C.; 2 pairs of houses, Canterbury-st., A. Manning, 53, Victoria-rd.; 16 houses, Cavendish-rd. and St. Philip's-rd., Crown & Cox, Tennis Court-rd.

Carlisle.—Marks & Spencer, Ltd., are to extend their premises on a site next to City Picture House, adjoining Ferguson's-lane.

Castle Donington.—R.D.C. decided on East Way site for non-parlour type houses.

Castleford.—U.D.C. to invite tenders for 310 houses in pairs on Lumley Hill site. Plans by L. Birch, S.

Chelmsford.—R.D.C. to apply for sanction to following: Great Baddow, 12 dwellings; Galleywood, 6; Little Baddow, 4; Boreham, 12; Broomfield, 12; Danbury, 4; Pleshey, 6; Rettendon, 8; Roxwell, 8; Stock, 6; Little Waltham, 6; Woodham Ferrers, 6; Writtle, 30; Highwood, 6; Ford End, 4; West Hanningfield, 6.

Chelmsford.—T.C. approved:—public-house, Baddow-rd., Chelmsford Brewery Co.; houses, Lynmouth-av., Sandford-rd. and Galleywood-rd., W. J. Wade.

Chesterfield.—T.C. approved:—6 houses, Newlandgardens, J. Collis & Sons, Ltd.; additions and alterations, Old Whittington School, Chesterfield, E.C.; additions to bakery, off Boythorpe-rd., Chesterfield Co-operative Society; alterations to premises, Hasland, Chesterfield Co-operative Society.

Chopwell.—Trustees of St. John's Parish Church proposing church hall, Hall-rd. Hetherington & Wilson, L.R.I.B.A., architects, 52, Westgate-rd., Newcastle-on-Tyne.

Coleraine.—Regional E.C. recommend new schools at Lismoyle, Cullycapple, Cashel Bridge, Damhead and Bohill. These would replace the schools at Lismoyle, Hervey Hill, Cullycapple, Ringsend, Letterloan, Lilleague, Damhead, Bohill and Cloyfin.

Cullingworth.—West Riding C.C. propose senior school for 320 scholars. Plans by County Architect, H. Wormald, County Hall, Wakefield.

Darlington.—Managers of St. Augustine's R.C. School, Coniscliffe-rd., propose elementary school at Eastburn.

Derby.—Extensions on cubicle system to be carried out at Isolation Hospital at £45,000.

Doncaster.—M.H. held inquiry into scheme for provision of new baths on the site at the junction of Catherine-st. and St. James-st. The application of the Corporation is for powers to borrow £40,256.

Dublin.—Following plans for new buildings and works of reconstruction have been approved by City Architect:—Sacred Heart Home, Drumcondra, additions; Granby-place, alterations and additions, A. Noyek & Sons; Charlemont-st., alterations and additions, St. Ultan's Hospital; Pimlico, houses, O'Connor & Treacy.

Durham.—R.D.C. decided to undertake slum clearance scheme, involving demolition of 462 houses in 10 areas and erection of 473 new residences. Scheme adopted subject to approval of Ministry.

Exeter.—For extension of Ladysmith senior boys' school, Heavitree, for which loan of £2,278 been sanctioned by Ministry, E.C. recommend City Architect prepare plans.

Finchley.—E.C. approved sketch plans for new school in Summers-lane.

Finchley.—Parish church parochial electors of St. Mary's School, Church End, Finchley, considering scheme for enlarging parish church. Rector, Rev. Stewart F. L. Bernays.

Finchley.—U.D.C. approved:—extension of stores, 1 and 2, Park-parade, Great North-rd., N.12, F. W. Woolworth & Co., Ltd.; 3 houses, North-crescent, Messrs. G. Payne & Co., Ltd.; 71 houses, Walfield-av., Wyatt's Farm, Whetstone, P. D. Walker; football stand, Glebe-lane, Summers-lane, Finchley Football Club.

Folkestone.—T.C. approved:—4 semi-detached houses, Wells-rd., Masters & Anslow; 4 semi-detached houses, Joyes-close, A. W. Pope; alterations, 36, Sandgate-rd., G. & A. Pryce; alterations, Lower Sandgate-rd., Auto Pilots, Ltd.

Gillingham.—T.C. approved: six houses, Lower Rainham-rd., East Rainham, by F. T. Mattocks for G. H. Ward; three houses, Henry-st., Rainham, by F. T. Mattocks for C. J. Howard.

Glasgow.—Hospital block at Stobhill Hospital to be reconstructed for home. Architect, T. Somers, George-st.—Reconstruction of Cinema, Victoria-rd. Architect, J. Ross, 50, Main-st., Wishaw.

Hamilton.—J.P. court house and offices, Bedford-st., Hamilton. Architect, Mr. Smith, County-bldgs., Hamilton.

Haworth.—West Riding C.C. propose alterations at Central Schools. Plans by H. Wormald, A.R.I.B.A., County Architect, County Hall, Wakefield.

Hendon.—R.D.C. received M.H. consent to borrowing £3,500 for housing site in Marsh-lane, Great Stanmore.

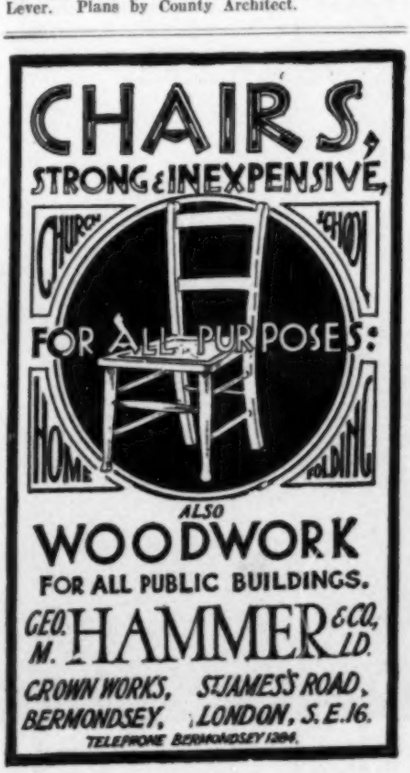
Kearsley.—Estimated cost of proposed new Lancashire County senior school at Kearsley, to accommodate 480 boys and 480 girls in separate departments, is just over £45,000.

Kettering.—R.D.C. purchased land at Corby for houses and instructed architect to invite tenders.—Eight more houses for Council at Pytchley.

Lanarkshire.—Council of Lanarkshire to erect 40 houses at Chapelhall, 28 at Carfin, 32 at Eddlewood. Architect, Mr. Smith, County-bldgs., Hamilton.

Leeds.—Hotel upon site in Queen's-rd., Burley, for Joshua Tetley & Sons, Ltd., The Brewery, Leeds. Architects, Kitson, Parish, Ledgard & Pyman, Lloyds Bank-chams., Vicar-lane, Leeds.

Little Lever.—Application to be made to M.H. for loan of £13,101 for new senior school, Little Lever. Plans by County Architect.



Liverpool.—Foden, Hemm & Williams, 199, Deansgate, Manchester, architects for junior and senior mixed school at Chatham-place.

Liverpool.—Plans been lodged with building surveyor for ice rink and boxing stadium in Audley-st., off London-rd. The project is being undertaken by Liverpool syndicate, and estimated cost is between £50,000 and £60,000. Plans by Liverpool architect, A. E. Shennan.

London (Bethnal Green).—L.C.C. recommend £3,000 for improvements to Parmiter's school.

London (Deptford).—B.C. recommend additional Borough Treasurer's department at £235.

London (Hackney).—B.C. received M.H. sanction for £3,182 for purchase of sites for branch baths to be erected at Englefield-rd. and Shacklewell-lane.—Plans passed: J. Jarvis & Sons, extension to turbine house, Hackney electricity power station, Millfields-rd.; W. Shurmur & Sons, Ltd., public convenience, Urswick-rd.; A. C. E. Brown, extension to Richmond House and Household Benefit Laundry Co.'s premises, rear 199, Richmond-rd.; T. J. Ware & Son, motor-van garage and surface water to part of Clapton Stadium, Millfields-rd.; Williams, Pettett & Gardner, acetylene factory premises, Eastern Arterial-av.; G. G. Winbourne, 12 houses and garages, Warwick-rd. and 5 houses, Knightland-rd.—L.C.C. recommend: £2,200 in respect of reconditioning, furnishing and equipping 18 cottages in Sidney-rd. for use of nurses at Hackney Hospital.

London (Wandsworth).—B.C. approved: E. W. Wallis, 5 houses, Woodfield-av., Streatham; Balmuir Garage, Ltd., garage, showrooms, etc., 257-259, Upper Richmond-rd., Putney; F. Harrington, shops and flats, Streatham-hill; A. M. L. McKay, alterations to stable buildings, Grove House, Princes-rd., Southfield; R. Dixon & Sons, 14 houses, Combemartin-rd.; Industrial Constructions, Ltd., extension, Cathkin Laundry, Putney Bridge-rd., Southfield; A. Soden, 6 houses, Headley-rd., Streatham; W. Lacy, extension, Catholic Church, Nightingale-sq., Balham; E. H. Wale, 4 houses, Kingston-rd., Putney; R. Gibson, Ltd., 2 garages with flats over adjacent to houses in Priory-lane, Putney, on Templeton estate, near Roehampton Gate to Richmond-park.

Manchester.—Charles Jackson & Son, quantity surveyors, 75, Princess-st., Manchester, nearly completed quantities for laundry block at Ancoats Hospital, Mill-st., for Board of Management. Architects, Thomas Worthington & Sons, FF.R.I.B.A., 178, Oxford-rd.

Merton and Morden.—U.D.C. to purchase land in Long-walk for housing.

North Riding.—Plans for new schools at Thornaby and Clifton (Without) York to cost £7,500 each were approved by North Riding E.C.

Newton.—School at Newton, Lanarkshire. Architect, J. Stewart, Albert-st., Motherwell.

Nuneaton.—T.C. approved premises to cost £500. R. C. Moon, B.S.

Ormskirk.—G. J. Gibbs & Partners, Lune-st., Preston, are engaged as consulting electrical engineers in connection with supply of electricity to the Ormskirk Institution, for Lancashire C.C.

Orpington.—Parish Council recommended Bromley R.D.C.: eight detached houses, Tysoe & Harris; 13 pairs of semi-detached houses at Greenwood Close, W. J. Brice.

Oswaldtwistle.—E.C. approved plans for senior council school, accommodating 520 senior children. Cost £25,418. Plans by Stephen Wilkinson, F.R.I.B.A., 16, Ribblesdale-place, Preston.

Peterborough.—T.C. to purchase land at rear of old infirmary for erection of public baths.

Ramsey.—U.D.C. approved plans for alterations to premises in High-st., for Hildred & Son.

Reigate.—T.C. received sanction from M.H. for borrowing additional sum of £600 in connection with the provision of 36 parlour houses in Linnell-rd. on Redstone housing site.

Retford.—R. E. Wilson, B.S., preparing a layout for housing scheme to be carried out by T.C.

Rochdale.—T.C. considering new fire station and dwellings.

Rothwell (Northants).—C. D. Rochester, A.R.I.B.A., High-st., preparing plans for 12 houses in Spencer-st., for U.D.C.

Sheffield.—City Council received sanctions for loan of £11,770 for additional land; £42,402 for houses; £20,000 for street and sewer works at Shiregreen; and £20,937 for houses and extensions to gas mains on Greenhill estate.

*See also List of Contracts, Competitions, etc.

A Staff Dance.

A most enjoyable function took place at the Hotel Metropole, W.C.2, on December 10, when Mr. D. Palmer Jones (chairman, Scaffolding (Great Britain), Ltd.) gave a dance to the members of the staff and a few friends. In addition to the chairman and Mrs. and Miss Palmer Jones, the company included Sir Arthur and Lady Roberts, Major Leslie Shingleton, Mr. F. H. Finlaison and Miss Finlaison, Mr. and Miss Beck, Mr. and Mrs. Eric Burt, Mr. Ben Carter, Mr. and Mrs. B. W. Perks, Mr. and Mrs. F. G. Joseph and Mr. and Mrs. R. C. Beattie. During the evening supper was taken in the restaurant, following which the chairman of the company made an appropriate speech. Major Leslie Shingleton also spoke. A capital entertainment was then provided, following which dancing was resumed.

THE BOROUGH POLYTECHNIC

EXHIBITION OF STUDENTS' WORK.

An exhibition of work at the Borough Polytechnic, S.E.1, on Friday and Saturday, December 12 and 13, attracted a large number of visitors. All departments were on view and many processes and experiments, both elementary and advanced, were demonstrated, the demonstrators being recruited from evening class students. In common with other sections, the Building Department had many attractions of interest to the visitor. The woodworking machinery in the joinery shop was in use, one-half of the space being occupied by finished examples of roofs, sashes, circle upon circle work, motor body building and handrailing, while in the other half advanced students were at work.

A feature of interest was the testing of building materials, which included crushing tests on bricks, stone pads and wood struts and cement briquettes. From the Brickwork Class there was a complete fireplace built in natural bricks, some excellent examples of arches and eyes, and nearby were finished and partly finished examples of stonemason's work in York stone and granite.

Some of the apparatus employed in the ascertaining of heat-radiating properties of building materials, the absorption of water by bricks and stones, and the testing of cement for specific gravity, setting time, etc., together with other apparatus, was shown in the Building Science Laboratory.

Now that the National Certificate Scheme for building students is in operation at the Borough Polytechnic, students who are successful will have passed through a three years' course consisting of studies in mathematics, practical geometry, building construction, building science, and builders' quantities, and that the Borough Polytechnic is particularly well equipped for these subjects is apparent from the large number of building students now studying there.

L.C.C. Lectures and Classes for Teachers.

A pamphlet containing particulars of lectures and classes still open during the spring and summer terms of 1931 is now published, and may be obtained from the Education Officer (H. 4), County Hall, S.E.1.

TRADE NEWS

Queen Mary's School, Lytham St. Annes.

We learn that Messrs. Val de Travers Asphalte Paving Co., Ltd., carried out a considerable amount of work at this school, illustrated in our last issue.

Eastman Dental Clinic.

In the description, in our last issue, of the Eastman Dental Clinic we omitted to state that several thousand "Bull-Dog" floor-clips were used on this contract, being used wherever board floors were being laid. These were supplied by Redalon, Ltd., Regent House, W.1.

Brookwood Mental Hospital.

We are informed that the Dorking Grey-Stone Lime Co., Ltd., of Betchworth, supplied their ground grey lime for the brickwork, and their "Dorlimite" (hydrated lime) for the plastering at the Brookwood new asylum blocks, illustrated in our issue for December 5. The plasterers engaged were Messrs. Aubry, Ltd.

Faience at Blackpool.

A new brochure illustrative of the uses to which their polychrome faience has been put at the New Olympia, Blackpool, has been issued by Shaw's Glazed Brick Co., Ltd., of Darwen, Lancs. A splendid series of illustrations show that not only the exterior, but the staircases, vestibules, promenades and the various corridors were faced with this material, nearly 30,000 cubic feet being used under the direction of the architect, Mr. J. C. Derham. We learn that the material, besides having very pleasing tones, has been proved to resist the effects of frost, rain, salts and other chemicals latent in the atmosphere. Architects who write for a copy of this brochure should also ask for a leaflet relating to Shaw's patent partitions for bath cubicles, etc.

Invisible Radiant Heating.

The progress made in warming buildings by radiant heat in preference to heating the air in rooms by convection has developed considerably since the first system of panel heating some twenty years ago. We have received details of the patented system of "Veneeray" invisible accessible heating, which, we learn, has achieved a considerable success since it was first installed some five years ago by reason of the great advantages of complete accessibility it affords in contradistinction to those systems where pipes are arranged or embedded below the surface plaster. "Veneeray" comprises special flat face radiator units covered with "hard"—sheets—called veneer sheets—made of any good conducting material, comprising metal or composition, of which there are many inexpensive forms on the market. The sheets are fixed in heat conducting relationship on the front of the assembled units, and extend beyond the area of the flat-faced units to within the desired architectural area as in the case of heat panels below windows, on walls, in ceilings, or as applied to skirtings. A very attractively-produced booklet, giving the architect full details of the system and details of the system in some of the buildings where the heating has been installed, is obtainable from the sole licensees, Messrs. Young, Austen and Young, 12, Buckingham-street, Strand, W.C.2.

Reinforced Concrete.

The immense advance which reinforced concrete has made during recent years and the varied types of structural and engineering jobs to which ferro-concrete is applicable is clearly shown by means of a pictorial record which Messrs. Peter Lind & Co., Ltd., have issued. In this is set out a selection of the various r.-c. and engineering structures designed and erected during the years 1915-1930. Sections are devoted to industrial buildings, foundations, piling, etc.; gas works; electricity works; collieries; bridges, culverts, etc.; reservoirs, water-towers, tanks, etc.; and marine structures. Old and new friends are to be seen amongst the buildings under these headings. We note the "Grain Silos, Welwyn," a magnificent example of the poetry of concrete; the Michelin factory at Stoke-on-Trent; and especially some good examples of road bridges—many of which have been built as a result of new arterial and other roads. The "Bridge of Calverley," for the West Riding County Council (Mr. H. R. Hepworth, A.M.Inst.C.E., County Surveyor), we illustrate here. The book gives a very fair impression of the high-class work carried out by Messrs. Peter Lind & Co., Ltd.

The Bridge of Calverley, West Riding.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 2 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 12 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 14 3	Do. Bullnose	9 15 0
Do., Bullnose	2 7 3	Blue Wire Cuts	7 5 0
White Midhurst Facing Bricks (delivered London site)	5 0 0		

Best Stourbridge Fire Brick :—
2½ in. 8 11 0 3 in. 10 3 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretchers	21 0 0	D'ble Str'tch'rs	29 10 0
Headers	29 10 0	D'ble Headers	26 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	One Side and two Ends	30 10 0
		Two Sides and one End	31 10 0
		Splays, and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS
Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. " "	2 4	4 in. " "	3 6

	s. d.	
Thames Ballast	9 9	per yd
Pit Sand	12 0	" "
Thames Sand	12 0	" "
Best Washed Sand	12 6	" "
¾ in. Shingle for Ferro-Concrete	11 6	" "
¼ in.	12 0	" "
¾ in. Broken Brick	11 6	" "
Pan Breeze	8 0	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.
Best Portland Cement. British.
Standard Specification. Test £2 6 0 to £2 8 0
39s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 7 6
Vitrocrete " "	0 7 6
Super Cement (Waterproof)	3 16 0
Ciment Fondu (F.O.R. Works)	4 15 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.
Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. d. 2 10

BURE STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE.—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube 4 5½
White basebed, 3d per ft. cube extra.
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

CHILMARK—RANDOM BLOCK—
At Nine Elms, per ft. cube 3 11

HOPTON-WOOD STONE.—
F.O.R. Quarries, Wirksworth, Derbyshire. s. d.
Random blocks from 10 ft. and over P. ft. cb. 14 0
Sawn two sides " 22 6
Sawn three or four sides " 27 6

YORK STONE, BLUE—*Robin Hood Quality*.
Delivered at any Goods Station, London.
6 in. sawn two sides landings to sizes (under 30 ft. super) Per ft. super 5 6
6 in. rubbed two sides, ditto " 6 0
3 in. sawn two sides slabs (random sizes) " 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) " 1 6½
1½ in. to 2 in. ditto, ditto " 1 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappled random blocks Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super 5 1½
6 in. rubbed two sides, ditto " 6 1½
4 in. sawn two sides slabs (random sizes) " 2 1½
3 in. ditto ditto " 2 10
2 in. self-faced random flags Per yd. super 5

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain 5s. 6d.; Moulded, 9s. 6d.: Cills, 10s. 6d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
6 × 11	£27 10	3 × 6	£20 0
6 × 9	25 0	3 × 11	22 0
4 × 8	25 0	2 × 11	23 0
4 × 7	23 0	3 × 9	22 0
3 × 6	20 0	2½ × 9	22 0
3 × 7	20 0	3 × 4½	20 0
2½ × 7	20 0	3 × 4	20 0

PLANED BOARDS.

1 × 11	£28 0	1 × 9	£26 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
⅝	18/-	1¼	29/-
¾	20/-	1½	33/-
1	23/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1¼	30/-
1½	34/-

MATCHING (BEST)

Inches.	per sq.
⅝	16/6
¾	19/-
1	24/-

lbs. BATTENS	s. d.
¾ × 2 per 100 ft.	2 6

SAWN LATHS. s. d.
Per bundle 2 0

1 INCH AND UP THICK.

Average price for prime quality.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
Best Scotch Glue, per cwt.	£4 10 0 to —
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	31 0 0	18 by 10	17 5 0
22 by 12	27 19 6	18 by 9	15 10 0
22 by 11	25 5 0	16 by 10	14 14 6
20 by 12	24 7 6	16 by 8	11 5 0
20 by 10	20 17 6		

TILES

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000, f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	£5 2 6
ditto hand-made ditto	5 7 6
Ornamental ditto	5 12 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£12 10 0
Plain Compound Girders	14 10 0
" Stanchions	16 10 0
" In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅜ in.	11 0 0	¾ in. to 2¾ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ¼ in. and under.	Fittings. Over ¼ in.	Flanges. ¼ in. and under.	Flanges. Over ¼ in.
	%	%	%	%	%	%
Gas	65	52½	45	47½	55	57½
Water	61½	48½	40	42½	50	52½
Steam	57½	45	35	37½	45	47½
Galv. gas	52½	40	35	37½	45	47½
Galv. water	47½	35	30	32½	40	42½
Galv. steam	42½	30	25	27½	35	37½

*C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends
3 in.	10d.	7½d.	2½d.
3½ in.	10½d.	8¼d.	2½d.
4 in.	10½d.	9½d.	2½d.
4½ in.	11½d.	10½d.	2½d.
5 in.	1/1½	11½d.	3½d.

*O.G. GUTTERS.

3 in.	1/0	10½d.	2½d.
3½ in.	1/0½	10½d.	2½d.
4 in.	1/1½	10½d.	2½d.
4½ in.	1/2½	1/-	2½d.
5 in.	1/5	1/2½	3½d.

*RAIN-WATER PIPES, &c.

Per yd. in 6 ft. Pipe.		Bends, stock Branches angles, stock angles.	
2 in. plain	1/2½	9½d.	1/2
2½ in. "	1/3	10½d.	1/4½
3 in. "	1/6½	1/1½	1/8½
3½ in. "	1/11	1/4½	1/11½
4 in. "	2/2½	1/7½	2/4½

*The above R.W. Goods prices are subject to an advance of 5% from October 29th, 1929.

L.C.C. COATED SOIL PIPES—London Prices ex Works

	Pipe, angles, stock angles.	Bends, stock Branches.	
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts. plain	2 5	1 9	2 1
2½ in. "	2 9½	1 10½	2 7
3 in. "	3 0	2 1	3 1
3½ in. "	3 3	2 7	3 7
4 in. "	3 8	2 11	4 1½

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Bends, stock Branches. Pipe, angles, stock angles.		
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	3 6	4 6	7 6
4 in. " "	4 6	5 6	9 3
5 in. " "	8 3	9 6	15 0
6 in. " "	7 3	1 6	19 0

Gaskon for jointing 41/- per cwt.

IRON—	Per ton in London. £ s. d.		£ s. d.
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 5 0	to	12 5 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	9 10 0	...	10 10 0
Steel Bars, Ferro-Concrete quality, basis price	9 0 0	...	10 0 0
Hoop iron, basis price	11 0 0	...	12 0 0
" Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—Ordinary sizes, to 20 g.	11 10 0	...	12 0 0
" " " 24 g.	13 0 0	...	14 0 0
" " " 26 g.	15 0 0	...	16 0 0
Sheets Flat Best Soft Steel, C.R and C.A quality—Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	14 10 0	...	15 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. by to 3 ft. to 26 g.	18 10 0	...	19 5 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—Ordinary sizes, 6 ft. to 9 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	18 10 0	...	19 10 0
Sheets Galvanised Flat, Best quality—Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	20 10 0	...	21 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	22 10 0	...	24 10 0
Best Soft Steel Sheets, 26 g.	24 0 0	...	25 0 0
Cut Nails, 3 in. to 6 in.	16 0 0	...	17 0 0

Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)

	£ s. d.
LEAD—Sheet. English, 4 lb. and up	24 0 0
Pipe in coils	24 10 0
Soil pipe	27 10 0
Compo pipe	28 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 2s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills per ton	£14 0 0

COPPER.

	s. d.
Seamless Copper tubes (basis) per lb.	1 3
Strong sheet "	1 0
Thin "	1 1
Copper nails "	1 7
Copper wire "	1 4

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS TOP IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/3	11/-	17/-	25/-	36/-	69/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps	35/-	45/-	66/-	120/- "

TIN. — English Ingots, 1/5 per lb. SOLDER.—Plumber's 8d., Tinmen's 10d., Blowpipe 11d. per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0 2 8	
" " " in barrels	"	0 2 10	
" " " in drums	"	0 3 1	
Boiled " " in barrels	"	0 3 1	
" " " in drums	"	0 3 3	
Turpentine in barrels	"	0 3 4	
" in drums (10 galls)	"	0 3 6	
Genuine Ground English White Lead, per ton		48 0 0	

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/0 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—(*cont.*)

PAINTS, &c.—(*cont.*)

GENUINE WHITE LEAD PAINT.

	£ s. d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganwyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots per ton delivered	66 10 0
Red Lead, Dry (packages extra) per ton	37 0 0
Best Linseed Oil Putty per cwt.	0 15 6
Fillicol "	0 16 6
Size. XD quality ... ftn.	0 3 0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per ft.		Per ft.	
15 oz. fourths	2½d.	32 oz. fourths	6½d.
15 ,, thirds	3½d.	32 ,, thirds	9d.
21 ,, fourths	3½d.	Obscured Sheet, 15 oz.	3½d
21 ,, thirds	4½d.	,, 21 oz.	4½d.
26 ,, fourths	4½d.	Fluted, 15 oz. 7d., 21 oz.	9½d.
26 ,, thirds	6½d.	Em'led, 15 oz. 4½d., 21 oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES. Per ft.

¼ Rolled plate	4½d.
¼ Rough rolled	5½d.
Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	5d.
Tinned do.	7d.

Cast plate is same price as rough rolled.

"VITA" GLASS.	Per foot. s. d.
Clear sheet—not exceeding 1 foot	1 0
Do. do. 2 feet	1 3
Do. over 2 feet	1 0
Polished plate—not exceeding 1 foot	1 6
Do. not exceeding 2 feet	3 0
Cathedral—not exceeding 1 foot	1 0
Do. larger sizes	1 6
Horticultural—for greenhouses, etc. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1 0
3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide	2 6

ULTRA VIOLET RAY GLASS.

RAYLITE.

Up to 2 sq. ft. 1/-. Up to 4 sq. ft. 1/2. Up to 8 sq. ft. 1/3.

FOREIGN.

HORTITEX (HORTICULTURAL).

Up to 1 sq. ft. 7d. Up to 2 sq. ft. 8d. Up to 3 sq. ft. 9d. (Not exceeding 24 in. by 18 in.)
Up to 4 sq. ft. 10d. Up to 8 sq. ft. 11d.

VARNISHES, &c.

		Per Gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Opal Carriage	ditto	1 4 0
Best ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 6
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 0
Hard Drying Oak	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 6
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 12 6
Best ditto	ditto	1 2 6
Best Japan Gold Size		0 12 0
Best Black Japan		0 10 0
Oak and Mahogany Stain (water)		0 12 0
Brunswick Black		0 7 0
Berlin Black		0 14 0
Knotting (potent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebene		0 9 0
Cullass Black Enamel		0 7 0

Merchandise Marks Act, 1926: Wall Board.

The Board of Trade announce that in pursuance of Section 7 of the Merchandise Marks, Act, 1926, draft Orders in Council were laid before Parliament on November 3 requiring imported wall board to bear an indication of origin on sale or exposure for sale in the United Kingdom.

L.M.B. Sports Association.

We give below results and table in connection with the L.M.B. Football League to Saturday, December 13 :—

RESULTS.

Downs ...	...	0	Trocoll ...	...	2
Portland ...	...	4	Elsilrac ...	...	2

TABLE.

	P.	W.	D.	L.	COALS. F.	A.	Pts.
Wills ...	9	8	1	—	46	8	17
Portland ...	10	7	1	2	27	18	15
Trocoll ...	10	6	2	2	47	12	14
Scafco ...	8	5	—	3	18	16	10
Higgs ...	8	2	2	4	28	26	6
Elsilrac ...	8	—	1	7	6	48	1
Downs ...	11	—	1	10	6	50	1

NEW BUILDINGS IN SCOTLAND

Aberdeen.—HOUSES.—Public Health and Housing Committees of Aberdeen Town Council have decided to recommend to the Council a house-building scheme under the Housing (Scotland) Act, 1930, for the construction of 2,400 houses during the next three years.

Dundee.—BUILDINGS.—Plans and sections of the following proposed new buildings, etc., have been lodged at the office of the City Engineer :—Craigie Quarry—explosive store for the T.C.; King-street—alterations for Independent Order of Rechabites (Mr. G. Jamieson, architect, 20, Whitehall-street); Kinghorne-road—houses for Mr. A. Thain (Mr. Joseph Johnston, architect, 32, Bank-street); Loraine-road — garage for Mr. Thomas B. Porteous (Mr. W. M. Patrick, architect, 26, Yeaman Shore); New-road, Broughty Ferry —workshop for Mr. John Ferrier (Mr. J. R. Ingram, architect, 5, Gray-street, Broughty Ferry); Overgate—additions for Mr. Andrew Ferguson (Mr. Joseph Johnston, architect, 32, Bank-street).

Edinburgh.—HOUSES.—Mr. E. J. MacRae, A.R.I.B.A., City Architect, has prepared plans for 84 houses at Niddrie Mains for the T.C. Tenders are being invited.

Musselburgh. — HOUSING. — The Musselburgh Town Council has decided to erect 200 houses within the next three years. The first 100 houses will be erected on a field at Stoneyhill.

TRADE OPPORTUNITIES ABROAD.

Anglo-Spanish Trade.

The following opportunities occur for British firms wishing to market goods in, or buy materials from, Spain :—

Spanish engineer desires to get into touch with British exporters of fireclay. (R.101.)

A British firm in Madrid wishes to represent a British firm selling machinery. (W.100.)

Further particulars may be obtained from the Secretary, Spanish Chamber of Commerce, 5, Fenchurch-street, E.C.3.

Ferro-Concrete Bridges, France.

His Majesty's Consul at Nantes reports that it has been decided to replace two wooden bridges, which span the river Loire at Tours, with two ferro-concrete bridges, each approximately 1,400 feet in length. No details are available, but British firms can obtain the address to which tenders should be addressed upon application to the Department of Overseas Trade, 35, Old Queen-street, S.W.1. Reference number A.X.10646.

Trade in Syria.

The Department of Overseas Trade informs us that a booklet has been prepared from information furnished by His Majesty's Consul-General at Beirut, containing hints for the guidance of commercial visitors to Syria and the Lebanon, which it is thought will be of interest to firms who may be contemplating sending a representative to those markets, and who are not familiar with local conditions. A similar booklet has been prepared by H.M. Consular Officers at Tangier and Rabat, for the use of commercial visitors to the Tangier, Spanish and French zones of Morocco.

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'† Bricklayers'† Plasterers'.†
Aberdeen	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Airdrie	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Alexandria	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Arbroath	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Ayrshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Bathgate	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2 1/3
Berwickshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Bo'ness	1/7	1/7	1/7	1/8	1/7	1/7	1/8	†1/2½
Broughty Ferry	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Clackmannanshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Coatbridge	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Dumbartonshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dumfries	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Dumfriesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Dundee	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dunfermline	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Duncon	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
East Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Edinburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Falkirk	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Forfarshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Fort William	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/2
Galashiels	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Greenock	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½
Hawick	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Helensburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Inverness	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1 1/2
Inverurie	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7½	1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kincardineshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Kinross-shire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Kirkcaldy	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Kirkwall	1/5	1/5	1/5	1/6	1/5	1/5	1/6	1/-
Lanarkshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Leith	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Midlothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½
Peebleesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Perth	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Perthshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Peterhead	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7½	1/2
Renfrewshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Rothesay	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Roxburghshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
St. Andrew's	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Selkirkshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Stirling	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Stirlingshire, West	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Stornoway	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
West Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 1057.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	10
Axed in stocks	" "	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	1	0
Setting ordinary register grates and stoves	each	1	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0
Chilmark stone fixed complete	" "	17	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	0	11
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1¼"
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights : average size	"	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1¼"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1¼"	2"	2¼"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	44	0
Do. Do. in flats	"	43	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	6
Obscured sheet	"	1	1
¼-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

*These prices apply to *new buildings only.* They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

PATENTS

APPLICATIONS PUBLISHED.

314,499.—Consortium fur Elektrochemische Industrie Ges: Paints.

337,399.—F. B. Dehn (American Rolling Mill Co.): Coated metal bodies and process of producing same.

337,463.—Mannesmannrohren-Werke: Pipe joints.

337,516.—F. T. Walker: Cavity walls.

337,521.—J. Y. Johnson (I. G. Farbenindustrie Akt.-Ges): Manufacture and production of materials suitable for road construction, coating purposes and the like, from asphalt, tar, and the like.

337,522.—E. Barlow: Flexible pipes or conduits.

337,523.—A. Rogler: Binding-compounds for painting purposes.

337,525.—H. L. Plummer and D. L. Irwin: Construction of roofings, partitions and the like.

337,562.—A. Folliet and N. Sainderichin: Protecting iron and steel.

337,567.—H. G. Clements and F. J. Ruffle: Device for holding or retaining a door window, or the like.

337,586.—A. Elliott: Checks for doors, windows, or other hinged members.

337,587.—T. E. Mansfield: Safety ladders for roofing, scaffolding, trestles, and extending ladders.

337,626.—R. S. Price: Astragals or glazing bars.

337,672.—Simplex Floor Planing and Treatment Co. (1929), Ltd., and M. Brown: Sandpapering and like machines for treating floors, decks, and like surfaces.

337,682.—British Thomson-Houston Co., Ltd.: Paints.

337,717.—G. Ziehl: Runners for frameless sliding glass doors.

Note.—Period for opposition expires January 12, 1931.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

STANJACK WOOD PRODUCTS, LTD. (251,974). Registered November 12. 35, Paradise-street, Birmingham. Carpenter, joiner, turner and woodworker. Nominal capital, £2,000.

F. PARHAM, LTD. (252,045). Registered November 17. Builder and contractor. At Eva-road, Gillingham. Nominal capital, £3,000.

JOHNSONS, BUILDERS (LEICESTER), LTD. (252,049). Registered November 17. 90, Highcross-street, Leicester. Builder and contractor. Nominal capital, £1,000.

ALLIED SUB-CONTRACTORS, LTD. (252,010). Registered November 14. 88, High-road, Mottingham, Kent. Erection and repair of properties, etc. Nominal capital, £1,000.

MARCH ESTATES, LTD. (251,998). Registered November 13. To acquire certain lands at March, Cambs; to construct sewers, roads, buildings and houses, etc. Nominal capital, £3,000. C. Greenwood, Hiddekel, March.

GOODLASS WALL AND LEAD INDUSTRIES, LTD. (251,977). Registered November 12. London House, 3, New London-street, E.C.3. Manufacturers of and dealers in refined pig lead, dry white lead, white lead in oil, white lead paint, lead sheets and pipes, block tin, shrapnel bullets, lead shot, etc. Nominal capital, £3,250,000.

ALDRIDGE BRICK, TILE AND COAL CO., LTD. (251,918). Registered November 10. Aldridge Colliery, Aldridge, near Walsall, Staffs. Nominal capital, £40,000.

BOLTON-UPON-DEARNE BRICK CO., LTD. (252,422). Registered December 3. Brick, tile and pottery manufacturers, etc. Nominal capital, £1,000. C. E. Hattan, The Brickworks, Furlong-road, Goldthorpe, near Rotherham.

TENDERS

CHRISTMAS HOLIDAYS.

Owing to the Christmas Holidays, all Tenders intended for our next issue should reach "The Editor" by first post on Monday, December 22.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office.*

Armley.—Alterations and additions to the Dennison Hall, for the Trustees. Messrs. Athrow & Dyson, architects, Doncaster:—
*H. & D. Leslie.

Ashington.—Council school at Bothal Ashington, for the Northumberland E.C.:—
*J. J. Robson, Ltd., Blyth £17,500

Beckenham.—Two conservatories in Kelsey-park, together with stokehole, potting shed and heating installation, for the U.D.C. Mr. C. E. Staddon, clerk:—
Superstructure and brickwork—
*C. White, Sedilla-works, Bromley Common £595
Heating apparatus—
*W. Wood & Son, Ltd., Taplow 92

Belfast.—Additional lavatory accommodation at Falls-road public baths; Peter's-hill public baths; Templemore avenue public baths; Ormean-avenue public baths, for the C.B. City Surveyor:—
Additional lavatory accommodation at Falls-road and Templemore-avenue baths—
*Thos. Lindsay, 2, Rishview-street, Belfast.
Additional lavatory accommodation at Ormeau-avenue baths—
*Wm. Lozan & Sons, Limestone-road.

Belfast.—Painting at Falls-road and Ligoniel public baths, for the C.B. City Surveyor:—
*Wm. Darrash, 86, Bridge-end, Belfast.

Bognor Regis.—Four cottages and set of farm buildings on Middleton estate, near Bognor Regis, for the West Sussex C.C. Mr. Haydn P. Roberts, F.R.I.B.A., County Architect, North-street, Chichester:—
Four cottages—

G. J. Norris, Worthing	£2,962
L. Hughes, Ancton	2,840
A. Barnes, Middleton	2,700
J. W. Boxall, Tillington	2,667
Sherfield Bros., Farnham	2,661
Bailey, Hartley & Watton, Bognor Regis	2,460
F. W. Hill, Bognor Regis	2,460
A. R. Dairy, Middleton	2,448
H. Sadler, Southsea	2,392
P. Cooper, Midhurst	2,272
F. Aldred, Boxgrove	2,268
A. Clare, Ltd., Worthing	2,256
E. S. Webberley, Bognor Regis	2,200
A. M. Urquhart, Chichester	2,020
Vick & Sons, Chichester	2,026
*Green & Sons, Portslade	1,743

Farm buildings—

A. Clare, Ltd., Worthing	1,499
L. Hughes, Ancton	1,420
F. W. Hill, Bognor Regis	1,410
A. R. Dairy, Middleton	1,345
J. W. Boxall, Tillington	1,330
P. Cooper, Midhurst	1,198
Vick & Sons, Chichester	1,169
F. Aldred, Boxgrove	1,050
Sherfield Bros., Farnham	998
A. Barnes, Middleton	930
Bailey, Hartley & Watton, Bognor Regis	889
A. M. Urquhart, Chichester	850
E. S. Webberley, Bognor Regis	840
G. J. Norris, Worthing	685
*Green & Sons, Portslade	650

Bridport.—10 houses on the Corporation's estate at "The Skilling," and 10 on "The Court Orchard Estate," also laying of sewers, etc., for the T.C. Mr. Robt. N. Armstrong, Brough Surveyor:—
Houses—

G. Abbott & Son, Bridport	£8,700 0 0
Channing & Osmond, Burnham-on-Sea	8,099 0 0
E. G. Joad, Sherborne	8,076 0 0
Theo. Conway, Ltd., Weymouth	7,936 0 0
Jesty & Baker, Weymouth	7,808 10 0
W. J. Cooper & Son, Bridport	7,720 0 0
F. Hinton & Son, Salisbury	6,982 17 0

Sewers—

F. Hinton & Son, Salisbury	604 0 0
W. J. Cooper & Son, Bridport	550 0 0
E. G. Joad, Sherborne	532 11 11
G. Abbott & Son, Bridport	510 0 0
Theo. Conway, Ltd., Weymouth	469 0 0
Jesty & Baker, Weymouth	426 0 0

Roads—

Smith, Wright & Co., Westminster	983 0 6
W. J. King, Taunton	730 0 0
H. Sadler, Southsea	690 18 0
Jesty & Baker, Weymouth	689 15 0
H. C. Hubble, Bournemouth	633 0 0
Ernest Ireland, Bath	620 15 10

Brighton.—School, for the Corporation. Messrs. Thos. Simpson & Son, architects, 16, Ship-street:—

T. J. Braydon & Son, Brighton	£26,938
Crosby & Co., Ltd., Farnham	33,221
Limpus & Son, Hove	32,460
Megus, Ltd., London	32,296
Saunders's, Brighton	32,153
Wm. Moss & Sons, Ltd., London	32,120
Walter Lawrence & Son, Ltd., London	31,613
James Barnes & Sons, Brighton	31,225
Bartley & Ward, Crawley	30,384
Spiers, Ltd., Glasgow	29,767
Rice & Son, Ltd., Brighton	29,596
Field & Cox, Ltd., Brighton	29,200
R. Corben & Sons, Maidstone	29,133
John Marsland & Sons, Ltd., London	28,967
R. Cook & Sons, Ltd., Crawley	28,938
F. T. Wilson & Sons, Brighton	28,872
*James Bodle, Ltd., 4, Grand-parade, Brighton	28,497

Carlisle.—For 100 houses on the Raffles-Newtown housing estate, for the City Council:—
* John Laing & Sons, Ltd., Carlisle (50).
*J. & R. Bell, Carlisle (50).

Carnforth.—Mortuary, for the U.D.C. Mr. F. Holt, surveyor. Quantities by the surveyor:—

John Rigg & Son, Ltd., Carnforth	£265 0 0
Arthur O. Thorns, Lancaster	264 4 8
Chris. Hodgson, Lancaster	251 19 0
George Boak, Carnforth	247 16 0
F. Haycock, Carnforth	244 15 0
J. Edmonson (Morecambe), Ltd., Morecambe	243 0 0
T. O. Latham, Lancaster	223 11 10
J. Dixon & Son, Carnforth	223 2 5
R. L. Dilworth, Ltd., Lancaster	218 13 0
*Wm. Robinson & Son, Netherkellet, Carnforth	187 1 8

Chelmsford.—Four bungalows and a well at Pendon Hill, for the R.D.C.:—
*R. W. Chandler, Widford £1,549

Chesterfield.—Pit-head baths at Glapwell Colliery. Mr. J. H. Forshaw, architect to the Miners' Welfare Committee, Mines Dept., Dean Stanley-street, Millbank, Westminster, S.W.:—
*T. Beighton, Brimington, Chesterfield.

Colne.—Sports pavilion at the Colne Secondary School, for the Lancashire C.C.:—
*R. Capstick & Sons, Colne £695

Darlaston.—168 houses on the third section of Catherine's Cross estate, for the T.C.:—
*A. C. S. Teece, Ltd., King's Hill, Wednesbury.

Denholme.—2,200 lin. yds. of 9-in. and 6-in. dia. earthenware pipe sewer, together with construction of manholes and settling tanks, storm tanks, filters and humus tanks, etc., for the U.D.C. Mr. A. Brooksbank, engineer, 14, The Exchange, Bradford:—
*Harold Hirst & Sons, Bradford £4,400
(In lieu of tender withdrawn.)

Derby.—Hotel at the corner of Chaddesden Lane-end, for the Stretton's Derby Brewery, Ltd. Mr. T. A. Thorpe, S. James-street, Derby:—
*W. Ford & Sons, Derby.

Driffield.—30 parlour type houses, for the U.D.C.:—
*Etherington & Co., Thorne.

Driffield.—Cottage Hospital, for the Driffield Cottage Hospital Committee. Messrs. Elcock & Sutcliffe, FF.R.I.B.A., architects, 60, Strand, W.C.2:—
*G. Eastwood, Middleton-on-the-Wolds, Driffield.

Dunmow.—Six houses at Great Easton, for the R.D.C.:—
*T. Harris, Dunmow £1,855 8 8

Evesham.—Wiring complete for 36 houses at Cheltenham-road, Broadway, and 18 houses at Wickhamford, for the Council. Mr. C. H. Gardiner, clerk, 64, Port-street. Quantities by Mr. R. J. Atkinson, surveyor, 4, Port-street:—

H. Burlingham & Co., Evesham	£363 19 0
Booth & Bomford, Evesham	381 18 6
F. A. Ames, Smethwick	362 6 0
P. Dove & Co., Stratford-on-Avon	346 6 0
Abell & Smith, Evesham	341 6 6
S. C. Averill & Son, Evesham	333 18 0
T. Vale & Sons, Stourport	328 11 0
H. C. Dillworth, Evesham	297 8 0
*A. Parker, Broadway	279 6 0

Goole.—9 "B" type and 66 "A" type houses on Marshfield Colonel's-walk and Morley-street sites, for the U.D.C. Mr. J. H. Castle, engineer and surveyor:—
*G. T. Farrow, Kirk-street, Hexthorpe, Doncaster £25,264

Haslingden.—Repairs and external painting at the Moorlands Institution, for the Lancashire C.C. Mr. Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston:—
*Exors. of George Collinge, Haslingden £415 16 6

Hertford.—Shopfront and interior fittings at 51, High-street:—
*A. Edmonds & Co., Ltd., Constitution Hill, Birmingham.

Keighley.—Extensions to the technical college for the West Riding C.C. Mr. H. Wormald, County Architect, County Hall, Wakefield:—
‡H. V. Robinson, Ltd.

Kidderminster.—Three shops for the Kidderminster Co-operative Society. Messrs. Pritchard, Godwin & Clist, F. & A.R.I.B.A., architects, Bank-buildings :—

*Lacy Bros., Kidderminster £3,000

Knaresborough.—15 houses, for the U.D.C. Mr. S. Blenkhorn, architect, High-street :—

*M. Bartholomew, Old Scriven, Knaresborough £5,625

Leeds.—Re-lining the bottom of the swimming-bath at Kirkstall-road baths, for the T.C. Mr. J. E. Acfield, City Engineer :—

*A. Andrews & Sons, Railway-street Marble Works, Marsh-lane, Leeds £236 12 2

Leeds.—Alterations and additions to the "Old Oak Inn," Otley-road, for Messrs. Joshua Tetley & Sons, Ltd., The Brewery, Leeds. Messrs. Kitson, Parish, Ledgard & Pyman, architects, Lloyd's Bank-chambers, Vicar-lane :—

B. Coates & Son.

Leeds.—Sale rooms and offices in St. Paul's-street, for Messrs. Howe & Hindle :—

*Lazenby Bros.

Leeds.—Electrical work at shops and offices in The Headrow, for the Improvements Committee :—

*Higginbotham & Sons, Idle £1,115

Leeds.—Alterations to the office accommodation at Dock-street depot, for the Corporation :—

*J. W. Shippen & Son, Ltd., Leeds £666

Leeds.—Block of buildings fronting St. George's-road, for the Pathological Department of the Leeds University. Messrs. Charlton & Proctor, architects, of Leeds :—

Building work—*Wm. Airey & Sons (Leeds), Ltd.
Steelwork—*G. Deepledge & Co., Ltd.
Asphalt work—*Tunstall's, Seyssel and Limmer Rock Asphalte Co., Ltd.

Liverpool.—United Methodist Church at Norris Green, for the Trustees. Messrs. Porter & Arnold, architects, 5, Market-square, Stafford :—

*George Platt & Sons, Ltd., Liverpool.
(Estimated cost £6,000.)

London.—Rearrangement, redecoration, repainting and relighting of the Mansion House, for the City Corporation :—

Holloway Bros. (London), Ltd.	£70,400	0	0
Ashby & Horner, Ltd.	69,735	0	0
Trollope & Colls, Ltd.	68,729	0	0
Dove Bros., Ltd.	67,878	0	0
Holland & Hannen and Cubitts, Ltd.	67,541	0	0
Higgs & Hill, Ltd.	57,054	0	0
*As adjusted	50,717	2	11

London.—Improvements to underground conveniences in Aldgate High-street, for the City Corporation :—

*W. H. Wagstaff & Son.

London.—Repair and decoration at Whitaker-buildings and Dron-buildings, for the City Corporation :—

Chalk & Son	£2,190
S. Wiener	1,998
L. & W. Whitehead, Ltd.	1,985
W. T. Crawley & Co., Ltd.	1,565
W. Cooke	1,492
*Hewitt & Sewell, Ltd.	1,177

London.—Installation of low-pressure hot-water heating apparatus in connection with the building of Hope-street central and junior Council schools, Islington, for the L.C.C. :—

		British Empire Materials.
Thames Bank Iron Co., Ltd.	£1,373	No variation.
J. & F. May	1,340	No variation.
Beaven & Sons, Ltd.	1,319	No variation.
Norris Warming Co., Ltd.	—	1,316
Hopes Heating and Lighting, Ltd.	1,313	No variation.
Clark, Hunt & Co., Ltd.	1,303	No variation.
W. G. Cannon & Sons, Ltd.	1,272	No variation.
Heywood & Bryett, 4a, Dartmouth-hill, S.E.10	1,250	*1,260
Architect's estimate	1,340	

(All of London.)

London.—Adaptation, for use by the Balham and Tooting commercial evening institute, of premises formerly occupied by the senior departments of the Tooting Graveney Council school, for the L.C.C. :—

	Basis (i).	*Basis (ii).*	*Variation if stepped floors are extended. Basis (i).*	*Basis (ii).*
Soole & Son, Ltd., Richmond	£4,926	£4,926	—£83	—£83
Cropley Bros., Ltd., Epsom	4,872	4,887	— 8	— 8
W. F. Goodchild	4,831	4,846	—93	—93
Holliday & Greenwood, Ltd.	4,596	4,596	—15	—15
John Garrett & Sons, Ltd.	4,573	4,573	+10	+10
Wm. Lowe & Sons, Ltd.	4,431	4,431	—	—
W. H. Gaze & Sons, Ltd.	4,405	4,405	+14	+14
Triggs & Co., Ltd.	4,384	4,384	—26	—26
Mullen & Lumsden, Ltd., 41, Eagle-street, W.C.1	4,353	*4,353	+30	+30
Lole & Co., Ltd.	4,349	4,375	+70	+70

(Remainder of London.)

(i) On the basis of all materials, except timber, being British, and (ii) on the same basis but including British Empire grown timber.

¶London.—Tenders accepted by H.M.O.W. for the week ending December 13 :—

Clerkenwell County Court—wall finishings—Mosaic & Terrazzo Co., Ltd., 60, Corporation-road, Newport.
Lands End, W.8—extension—W. H. Marks, 7, Carrallack-terrace, St. Just, Cornwall.
Crewe, Employment Exchange—erection—T. G. Huxley & Co., 175, Westminster-road, Chester.
British Museum, Supplementary and Egyptian Rooms — heating, etc. — H. C. Goodman, Caversham-bridge Foundry, Reading.

¶London.—The following works contracts have been placed by the War Office during the week ending December 11 :—

South Aldershot, Stanhope Lines—Improvements to married soldiers' quarters—Rigg & Remington, Ltd., London.
Tidworth—artificers' work—W. E. Chivers & Sons, Ltd., Devizes.
Bulford—single officers' quarters—W. E. Chivers & Sons, Ltd., Devizes.
Larkhill and Outstations—artificers' work—James & Crockerell, Durrington.

London.—Reconstruction and alterations to 38, Wellington-street, in order to provide for a 10-ft. wide roadway entrance to the new Works Department Depôt, James-street, for the St. Pancras B.C. :—

Canonbury Construction Co., Ltd.	£700
R. Woollaston & Co.	690
King & Stannard	650
Stevens & Sons	646
Lamerton & Norris	639
A. Bedford	632
Charles Berger	614
*William Downs, Ltd., 12, Hampton-street, S.E.17	595

Middlesex.—Reconstruction of Yeading-lane from the Uxbridge-road to the White Hart, Northolt, for the C.C. :—

*Associated Asphalt Co. £14,097 18 4

Nantwich.—Sewage disposal works and the provision and laying of concrete and stoneware pipe sewers with manholes, etc.; and provision and laying of 27-in., 24-in., 21-in., 18-in. and 15-in. concrete pipes; also 9-in. and 6-in. stoneware pipes, for the R.D.C. Mr. H. Crabtree, engineer, 21, Pillory-street, Nantwich :—

*William Mulcaster, Haslington, near Crewe £25,720

Newcastle-on-Tyne.—Warehouse, for the Tyne Tees Steam Shipping Co., Ltd., 25, King-street. Messrs. Marshall & Tweedy, FF.R.I.B.A., architects, Mervyn-street and 129, Pilgrim-street :—

*James R. Rutherford & Sons, Ltd., Minories Joinery Works, Jesmond-road, Jesmond, Newcastle-on-Tyne.

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Penwith (Cornwall).—Four houses each at Sennen, St. Levan, St. Buryan, Perranuthnoe, and St. Hilary parishes, for the West Penwith R.D.C. Col. S. H. Cornish, 8, Parade-street, Penzance :—

	Per block
St. Buryan parish—	
Harvey & Sons, Mousehole	£2,532 9
F. Ansell, Penzance	2,236 0
Jory & Sons, Hayle	2,100 0
E. Shannon & Johns, St. Buryan	2,018 0
J. S. Tregenza & Sons, Newlyn	2,000 0
*Peake & Sons & Johns, Newlyn	1,988 0
St. Hilary parish—	
W. J. Rowe & Sons, Marazion	2,260 10
F. Ansell, Penzance	2,250 0
King & Rowe, St. Hilary	2,240 0
Jory & Sons, Hayle	1,942 19
T. H. Tonkin, Newlyn	1,860 0
*W. H. Dudley, Carbis Bay	1,812 0
St. Levan parish—	
Humphrys Bros., Porthcurno	2,493 15
F. Ansell, Penzance	2,245 0
Jory & Sons, Hayle	2,100 0
*Peake & Sons & Johns, Newlyn	2,014 0
R. Hosking & Son, Hea Moor, S.O.	1,999 0
Perranuthnoe parish—	
F. Ansell, Penzance	2,256 0
R. Hosking & Son, Hea Moor, S.O.	1,996 0
T. H. Tonkin, Newlyn	1,980 0
*Jory & Sons, Hayle	1,942 19
Sennen parish—	
Humphrys Bros., Porthcurno	2,501 8
F. Ansell, Penzance	2,236 0
Jory & Sons, Hayle	2,100 0
Peake & Sons & Johns, Newlyn	2,014 0
*R. Hosking & Son, Hea Moor, S.O.	1,999 0

Peterborough.—38 houses, Park-lane, for the City Council. Mr. W. H. A. Court, City Engineer, 6, Long Causeway :—

*T. Scotney, Bourne, Lincs £10,931
(In lieu of tender withdrawn.)

Prestwich.—Draining and fencing of the Heys playing field, for the U.D.C. Mr. H. T. Ainsworth, engineer and surveyor :—

Draining—
*Wm. Barron & Son, Ltd., Borrowash, Derby.
Fencing—
*W. Blacker, Staley Ironworks, Stalybridge.

Ramsgate.—12 houses in Margate-road, for the T.C. Mr. T. G. Taylor, Borough Engineer :—

J. B. Sharman, Ltd.	£6,999
Grummant Bros.	5,981
Darby & Martin	5,529
J. J. Burr Co.	5,412
*H Newby, Ltd., Victoria-road	5,130

(All of Ramsgate.)

Reading.—502 houses on the Whitley housing for the C.B. :—

‡J. Gerrard & Sons, Ltd., Swinton, Manchester £162,940

Reading.—Service reservoir and water tower at Tilehurst, for the C.B. :—

*Holloway Brothers (London), Ltd., 157, Grosvenor-road, Westminster, S.W.1 ..... £108,630

Romford.—Alteration of the Arcade offices, for the U.D.C. :—

*S. J. Davis £869

Sheffield.—46 non-parlour type houses on the Manor estate, for the T.C. Mr. W. G. Davies, F.R.I.B.A., City Architect :—

*Maxfield Bros., 1, Gainsford-road, Sheffield £21,281

Sheffield.—Premises on site of Fitzallen Market, for Messrs. Montague Burton, Ltd. Mr. H. Wilson, architect, 81, North-lane, Roundhay, Leeds :—

*John Middleton, Ltd., Sheffield.

South Bank (Yorks).—Handicraft centre at the Cromwell-road Council school, for the North Riding C.C. Mr. J. C. Wrigley, architect, Education Offices, Northallerton :—

*J. S. Earnshaw, Stockton-on-Tees £639 8 10

Southgate.—Alterations and additions at the Minchenden Secondary school, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect :—

C. Miskin & Sons, Ltd., St. Albans	£31,665
W. Lawrence & Son, Ltd., London, E.C.2	31,310
R. Ginn & Son, Hertford	31,299
J. Laing & Son, Ltd., Mill Hill, N.W.7	30,922
Y. J. Lovell & Son, Gerrard's Cross	30,875
G. Groves & Son, Tottenham, N.	30,796
A. Fairhead & Sons, Ltd., Enfield, Middlesex	30,724
Henry Knight & Son, Tottenham, N.	30,561
C. J. Newby & Bros., Southgate, N.	30,327
Patman & Fotheringham, Ltd., London, N.1	30,317
‡Albert Monk, Lower Edmonton	30,160

Stratford-on-Avon.—Alterations to the existing Council offices, for the R.D.C. :—

*Harris Bros. £981

Sunbury-on-Thames.—External painting of 100 houses in Cavendish-road, Sunbury, for the U.D.C. Mr. E. Beechin, clerk :—

*Henry Skinner, Windmill-road, Sunbury £198 15

Tynemouth.—Construction of a mass concrete retaining wall at Cullercoats, for the C.B. Mr. John L. Beckett, Borough Surveyor :—

*S. Fenwick & Co., Dunn-street, Newcastle-on-Tyne £7,130 5 9

Wallasey.—92 houses on the Oakdale-road estate, for the T.C. Mr. L. St. G. Wilkinson, surveyor:—
*Lloyd & Cross, Ltd., Birkenhead.

Warrington.—Lodge and entrance gates and alterations to receiving block at the Whitecross Institution, for the Management Committee. Messrs. William & Segar Owen, F.R.I.B.A., architects, Palmyra-square-chambers:—
*J. Dolan & Son, Warrington.

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West Ham.—For the erection of Cheshunt-road school, for the E.C.:—

H. W. Wilson, Ltd.	£33,012
S. E. Mess & Sons	32,000
West Ham Corporation Works Dept.	31,625
R. J. Truscott	30,947
Hammond & Barr, Ltd.	30,896
W. J. Cearns	30,158
F. J. Coxhead	29,994
Spiers, Ltd.	29,960
G. H. Dibblin	29,349
E. A. Russell, Ltd.	29,032
H. C. Horswill, Ltd.	28,971
A. E. Symes, Ltd.	28,843
S. E. Adams	28,000

Weymouth.—Reinforced concrete pier, dredging and other works at Weymouth Harbour, for the G.W.R. The Engineer, Paddington Station, W.2:—
*Bolton & Lakin, Ltd., 126, Colmore-row, Birmingham.

Weymouth.—Shelter in King's State, for the Corporation. Mr. R. W. Vine, Borough Engineer and Surveyor:—
*Jesty & Baker, North Quay, Weymouth £692

Wolstanton.—For (*a*) school clinic and (*b*) alterations to Broadmeadow school, for the E.C.:—
(*a*)—*Sambrook Bros., Burslem, Staffs £1,696
(*b*)—*Sambrook Bros., Burslem, Staffs 8,968

Woodstock.—Cottages, for the R.D.C.: Steeple Aston, one pair; Bladon, six pairs; Combe, one pair; Deddington, two pairs; Stonesfield, two pairs; and Tackley, two pairs. Mr. C. W. Page, surveyor, Oxford-road, Kidlington:—

Bladon, six pairs—	
*H. Oakley, Woodstock	£4,680
Combe, one pair—	
*H. Oakley, Woodstock	810
Deddington, two pairs—	
*A. Hermon & Son, King's Sutton	1,610
Steeple Aston, one pair—	
*H. Oakley, Woodstock	840
Stonesfield, two pairs—	
*C. Bishop, Stonesfield	1,640
Tackley, two pairs—	
*C. Roberts & Sons, Woodstock (Subject to M.H. approval.)	1,595

Worsley.—Worsley new senior Council school, for the Lancashire E.C. Mr Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston.:—

Builders—	
*James Cocker, Ltd., Walkden	£33,358
Brickwork—*G. & J. Seddon, Ltd., Little Hulton.	
Slater—*W. Altham, Bolton.	
Plumbing and Glazing—*A. J. Heron, Manchester.	
Plastering—*A. Broomhead, Ltd., Pendleton.	
Painting—*L. Haughton, Manchester.	
Mason—*Bolton Bath Stone, Concrete & Asphalte Co., Ltd., Bolton.	

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